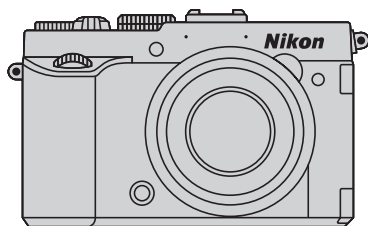


Nikon

DIGITAL CAMERA

COOLPIX P7700

User's Manual



En

COOLPIX P7700 Recommended Features



P, S, A, M Mode 48

Choose these modes for greater control over shutter speed and aperture value. Settings in the quick menu (67) or shooting menu (71) are available to suit the shooting conditions and the type of shot you want to capture.

U1, U2, U3 User Settings Mode 52

Up to 3 setting combinations that are frequently used for shooting can be saved in U1, U2 and U3.

Movie Mode and CSM (Movie Custom Setting) Mode..... 101

In movie mode, you can record slow motion and fast motion movies, in addition to basic movies.

In movie custom setting mode, you can use aperture-priority auto or manual mode, or change the settings for image recording.

Compatibility with a Variety of Accessories (Available Separately)

• Speedlights (External Flash Unit)..... 87

You can use the Speedlight that supports the Nikon Creative Lighting System (CLS). Also, an off-camera flash can be controlled wirelessly by setting the flash mode to **CMD** (commander mode).

• Remote Control 55

The shutter can be released remotely using the Remote Control ML-L3 or Remote Cord MC-DC2.

• GPS Unit 114

You can record position information (latitude and longitude) on the pictures to be shot.

Introduction	
Parts of the Camera and Main Functions	
The Basics of Shooting and Playback	
Shooting Features	
Playback Features	
Recording and Playing Back Movies	
General Camera Setup	
Technical Notes and Index	

Introduction

Read This First

Thank you for purchasing the Nikon COOLPIX P7700 digital camera.

Before using the camera, please read the information in “For Your Safety” (vi to viii) and familiarize yourself with the information provided in this manual. After reading, please keep this manual handy and refer to it to enhance your enjoyment of your new camera.

Confirming the Package Contents

In the event that any items are missing, please contact the store where you purchased the camera.



COOLPIX P7700
Digital Camera
(with Accessory Shoe Cover
BS-1)



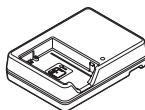
Camera Strap



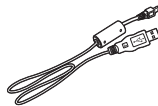
Lens Cap LC-CP26
(attached to the camera
body)



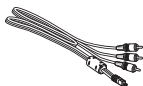
Rechargeable Li-ion
Battery EN-EL14
(with terminal cover)



Battery Charger
MH-24*



USB Cable UC-E17



Audio Video Cable EG-CP16



ViewNX 2 (CD-ROM)



Reference Manual
(CD-ROM)

- User's Manual (this manual)
- Warranty

* A plug adapter is included if the camera was purchased in a country or region that requires a plug adapter. The shape of the plug adapter varies with the country or region of purchase.

NOTE: A memory card is not included with the camera.

About This Manual

If you want to start using the camera right away, see “The Basics of Shooting and Playback” (16).

See “Parts of the Camera and Main Functions” (1) for more information on the names and principle functions of the camera parts.

About the Included “Reference Manual CD-ROM”

A PDF version of the COOLPIX P7700 Reference Manual can be found on the included CD-ROM. Refer to it for more detailed information.

Viewing the “Reference Manual CD-ROM”

The Reference Manual can be viewed using Adobe Reader, available for free download from the Adobe website.

- 1 Start the computer and insert the “Reference Manual CD-ROM”.
- 2 Double-click the **COOLPIX P7700** CD-ROM icon (Windows 7/Windows Vista: in **Computer**; Windows XP: in **My Computer**; Mac OS X: on the desktop).
- 3 Double-click the **INDEX.pdf** icon to display the language selection screen. Click a language and follow the links to view the Reference Manual.

Other Information

- Symbols and Conventions

To make it easier to find the information you need, the following symbols and conventions are used in this manual:

Icon	Description
	This icon indicates cautions and information that should be read before using the camera.
	This icon marks notes, information that should be read before using the camera.
	These icons indicate other pages containing relevant information;  *: “Reference Section”,  : “Technical Notes and Index.”

* Refer to the Reference Manual CD-ROM for pages indicated with .

- SD, SDHC and SDXC memory cards are referred to as “memory cards” in this manual.
- The setting at the time of purchase is referred to as the “default setting.”
- The names of menu items displayed in the monitor screen, and the names of buttons or messages displayed on a computer monitor appear in bold.
- In this manual, images are sometimes omitted from monitor screen samples so that monitor indicators can be more clearly shown.
- The illustrations of monitor content and camera may differ from the actual product.

Information and Precautions

Life-Long Learning

As part of Nikon's "Life-Long Learning" commitment to ongoing product support and education, continually updated information is available online at the following sites:

- For users in the U.S.A.: <http://www.nikonusa.com/>
- For users in Europe and Africa: <http://www.europe-nikon.com/support/>
- For users in Asia, Oceania, and the Middle East: <http://www.nikon-asia.com/>

Visit these sites to keep up-to-date with the latest product information, tips, answers to frequently asked questions (FAQs), and general advice on digital imaging and photography. Additional information may be available from the Nikon representative in your area. Visit the site below for contact information:

<http://imaging.nikon.com/>

Use Only Nikon Brand Electronic Accessories

Nikon COOLPIX cameras are designed to the highest standards and include complex electronic circuitry. Only Nikon brand electronic accessories (including battery chargers, batteries and AC adapters) certified by Nikon specifically for use with this Nikon digital camera are engineered and proven to operate within the operational and safety requirements of this electronic circuitry.

THE USE OF NON-NIKON ELECTRONIC ACCESSORIES COULD DAMAGE THE CAMERA AND MAY VOID YOUR NIKON WARRANTY.

The use of third-party rechargeable Li-ion batteries not bearing the Nikon holographic seal could interfere with normal operation of the camera or result in the batteries overheating, igniting, rupturing, or leaking.

For more information about Nikon brand accessories, contact a local authorized Nikon dealer.

Holographic seal: Identifies this device as an authentic Nikon product.



Before Taking Important Pictures

Before taking pictures on important occasions (such as at weddings or before taking the camera on a trip), take a test shot to ensure that the camera is functioning normally. Nikon will not be held liable for damages or lost profits that may result from product malfunction.

About the Manuals

- No part of the manuals included with this product may be reproduced, transmitted, transcribed, stored in a retrieval system, or translated into any language in any form, by any means, without Nikon's prior written permission.
- Nikon will not be held liable for any damages resulting from the use of this product.
- Nikon reserves the right to change the specifications of the hardware and software described in the documentation at any time and without prior notice.
- While every effort was made to ensure that the information in the documentation is accurate and complete, we would appreciate it were you to bring any errors or omissions to the attention of the Nikon representative in your area (address provided separately).

Notice Concerning Prohibition of Copying or Reproduction

Note that simply being in possession of material that was digitally copied or reproduced by means of a scanner, digital camera or other device may be punishable by law.

• Items prohibited by law from being copied or reproduced

Do not copy or reproduce paper money, coins, securities, government bonds or local government bonds, even if such copies or reproductions are stamped "Sample." The copying or reproduction of paper money, coins, or securities which are circulated in a foreign country is prohibited. Unless the prior permission of the government was obtained, the copying or reproduction of unused postage stamps or post cards issued by the government is prohibited.

The copying or reproduction of stamps issued by the government and of certified documents stipulated by law is prohibited.

• Cautions on certain copies and reproductions

The government has issued cautions on copies or reproductions of securities issued by private companies (shares, bills, checks, gift certificates, etc.), commuter passes, or coupon tickets, except when a minimum of necessary copies are to be provided for business use by a company. Also, do not copy or reproduce passports issued by the government, licenses issued by public agencies and private groups, ID cards and tickets, such as passes and meal coupons.

• Comply with copyright notices

The copying or reproduction of copyrighted creative works such as books, music, paintings, woodcut prints, maps, drawings, movies, and photographs is governed by national and international copyright laws. Do not use this product for the purpose of making illegal copies or to infringe copyright laws.

Disposing of Data Storage Devices

Please note that deleting images or formatting data storage devices such as memory cards or built-in camera memory does not completely erase the original image data. Deleted files can sometimes be recovered from discarded storage devices using commercially available software, potentially resulting in the malicious use of personal image data. Ensuring the privacy of such data is the user's responsibility.

Before discarding a data storage device or transferring ownership to another person, erase all data using commercial deletion software, or format the device and then completely refill it with images containing no private information (for example, pictures of empty sky) (remove the GPS Unit (available separately)). Be sure to also replace any pictures selected for the **Select an image** option in the **Welcome screen** setting (□110). Care should be taken to avoid injury or damage to property when physically destroying data storage devices.

For Your Safety

To prevent damage to your Nikon product or injury to yourself or to others, read the following safety precautions in their entirety before using this equipment. Keep these safety instructions where all those who use the product will read them.



This icon marks warnings, information that should be read before using this Nikon product, to prevent possible injury.

WARNINGS

Turn off in the event of malfunction

Should you notice smoke or an unusual smell coming from the camera or Battery Charger, unplug the Battery Charger and remove the battery immediately, taking care to avoid burns. Continued operation could result in injury. After removing or disconnecting the power source, take the equipment to a Nikon-authorized service representative for inspection.

Do not disassemble

Touching the internal parts of the camera or Battery Charger could result in injury. Repairs should be performed only by qualified technicians. Should the camera or Battery Charger break open as the result of a fall or other accident, take the product to a Nikon-authorized service representative for inspection, after unplugging the product and/or removing the battery.

Do not use the camera or Battery Charger in the presence of flammable gas

Using the camera in the presence of flammable gases such as propane and gasoline, as well as flammable sprays or dust could result in explosion or fire.

Handle the camera strap with care

Never place the strap around the neck of an infant or child.

Keep out of reach of children

Do not keep the products within reach of children. Doing so may cause injury. Particular care should be taken to prevent infants from putting the battery or other small parts into their mouths.

Do not remain in contact with the camera, battery charger, or AC adapter for extended periods while the devices are on or in use.

Parts of the devices become hot. Leaving the devices in direct contact with the skin for extended periods may result in low-temperature burns.

Observe caution when handling the battery

The battery may leak, overheat, or explode if improperly handled. Observe the following precautions when handling the battery for use in this product:

- Before replacing the battery, turn the product off. If you are using the Battery Charger/AC adapter, be sure it is unplugged.
- Use only a Rechargeable Li-ion Battery EN-EL14 (included). Charge the battery by inserting it in a Battery Charger MH-24 (included). For Remote Control ML-L3 (available separately), use only 3 V CR2025 lithium battery.
- When inserting the battery, do not attempt to insert it upside down or backwards.
- Do not disassemble the battery or attempt to remove or break the battery insulation or casing.
- Do not expose the battery to flame or to excessive heat.
- Do not immerse in or expose to water.
- Replace the terminal cover when transporting the battery. Do not transport or store with metal objects such as necklaces or hairpins.
- The battery is prone to leakage when fully discharged. To avoid damage to the product, be sure to remove the battery when no charge remains.
- Discontinue use immediately should you notice any change in the battery, such as discoloration or deformation.

- If liquid from the damaged battery comes in contact with clothing or skin, rinse immediately with plenty of water.
- If leaked battery fluid gets into your eyes, rinse them out immediately with clean running water and get medical treatment.
- Do not attempt to charge batteries that are not rechargeable.

Observe the following precautions when handling the Battery Charger

- Keep dry. Failure to observe this precaution could result in fire or electric shock.
- Dust on or near the metal parts of the plug should be removed with a dry cloth. Continued use could result in fire.
- Do not handle the plug or go near the Battery Charger during lightning storms. Failure to observe this precaution could result in electric shock.
- Do not damage, modify, forcibly tug or bend the USB cable, place it under heavy objects, or expose it to heat or flames. Should the insulation be damaged and the wires become exposed, take it to a Nikon-authorized service representative for inspection. Failure to observe these precautions could result in fire or electric shock.

- Do not handle the plug or Battery Charger with wet hands. Failure to observe this precaution could result in electric shock.
- Do not use with travel converters or adapters designed to convert from one voltage to another or with DC-to-AC inverters. Failure to observe this precaution could damage the product or cause overheating or fire.

Use appropriate cables

When connecting cables to the input and output jacks, use only the cables provided or sold by Nikon for the purpose, to maintain compliance with product regulations.

Handle moving parts with care

Be careful that your fingers or other objects are not pinched by the lens cover or other moving parts.

CD-ROMs

The CD-ROMs included with this device should not be played back on audio CD equipment. Playing CD-ROMs on an audio CD player could cause hearing loss or damage the equipment.

Observe caution when using the flash

Using the flash close to your subject's eyes could cause temporary visual impairment. Particular care should be observed if photographing infants, when the flash should be no less than 1 m (3 ft 4 in.) from the subject.

Do not operate the flash with the flash window touching a person or object

Failure to observe this precaution could result in burns or fire.

Avoid contact with liquid crystal

Should the monitor break, care should be taken to avoid injury caused by broken glass and to prevent liquid crystal from the monitor touching the skin or entering the eyes or mouth.

Turn the power off when using inside an airplane or the hospital

Turn the power off while inside the airplane during take off or landing. Also, before boarding an airplane, set the GPS tracking information recording function to OFF. Follow the instructions of the hospital when using while in a hospital. The electromagnetic waves emitted by this camera may disrupt the electronic systems of the airplane or the instruments of the hospital.

3D Images

Do not continuously view 3D images recorded with this device for extended periods, whether on a television, monitor, or other display. In the case of children whose visual systems are still maturing, consult a pediatrician or ophthalmologist prior to use and follow their instructions. Prolonged viewing of 3D images may cause eye strain, nausea, or discomfort. Cease use should any of these symptoms occur and consult a physician if necessary.

Notices

Notices for Customers in the U.S.A.

IMPORTANT SAFETY INSTRUCTIONS -

SAVE THESE INSTRUCTIONS.

DANGER - TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, CAREFULLY FOLLOW THESE INSTRUCTIONS

For connection to a supply not in the U.S.A., use an attachment plug adapter of the proper configuration for the power outlet if needed.

The power supply unit is intended to be correctly orientated in a vertical or floor mount position.

Federal Communications Commission (FCC) Radio Frequency Interference Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this

equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/television technician for help.



Nikon

COOLPIX P7700

CAUTIONS

Modifications

The FCC requires the user to be notified that any changes or modifications made to this device that are not expressly approved by Nikon Corporation may void the user's authority to operate the equipment.

Interface Cables

Use the interface cables sold or provided by Nikon for your equipment. Using other interface cables may exceed the limits of Class B Part 15 of the FCC rules.

Notice for Customers in the State of California

WARNING

Handling the cord on this product will expose you to lead, a chemical known to the State of California to cause birth defects or other reproductive harm.

Wash hands after handling.

Nikon Inc.,
1300 Walt Whitman Road,
Melville, New York 11747-3064
USA
Tel: 631-547-4200

Notice for Customers in Canada

CAUTION

This Class B digital apparatus complies with Canadian ICES-003.

ATTENTION

Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

Notices for Customers in Europe

CAUTIONS

RISK OF EXPLOSION IF BATTERY IS REPLACED BY AN INCORRECT TYPE.

DISPOSE OF USED BATTERIES ACCORDING TO THE INSTRUCTIONS.

This symbol indicates that this product is to be collected separately.



The following apply only to users in European countries:

- This product is designated for separate collection at an appropriate collection point. Do not dispose of as household waste.
- For more information, contact the retailer or the local authorities in charge of waste management.

This symbol on the battery indicates that the battery is to be collected separately.



The following apply only to users in European countries:

- All batteries, whether marked with this symbol or not, are designated for separate collection at an appropriate collection point. Do not dispose of as household waste.
- For more information, contact the retailer or the local authorities in charge of waste management.

Table of Contents

Introduction	ii
Read This First.....	ii
Confirming the Package Contents.....	ii
About This Manual.....	iii
Information and Precautions.....	iv
For Your Safety	vi
WARNINGS	vi
Notices	ix
Parts of the Camera and Main Functions.....	1
The Camera Body	1
Principle Functions of the Controls	3
Attaching the Camera Strap	7
Attaching and Detaching the Lens Cap	7
Opening and Adjusting the Angle of the Monitor	8
Switching the Monitor Screen (DISP Button)	9
Basic Menu Operations	10
Monitor Screen	12
The Basics of Shooting and Playback.....	16
Preparation 1 Charge the Battery.....	16
Preparation 2 Insert the Battery.....	18
Preparation 3 Insert a Memory Card	20
Internal Memory and Memory Cards.....	21
Approved Memory Cards	21
Step 1 Turn the Camera On	22
Turning the Camera On and Off.....	23
Setting the Display Language, Date, and Time.....	24
Step 2 Select a Shooting Mode.....	26
Available Shooting Modes	27
Step 3 Frame a Picture.....	28
Using the Zoom.....	29
Step 4 Focus and Shoot	30
Step 5 Play Back Images	32
Step 6 Delete Unwanted Images.....	33

Shooting Features	34
 (Auto) Mode	34
Scene Mode (Shooting Suited to Scenes)	35
Viewing a Description (Help Information) of Each Scene	35
Characteristics of Each Scene	36
Using Skin Softening	44
Special Effects Mode (Applying Effects When Shooting)	45
P, S, A, M Modes (Setting the Exposure for Shooting)	48
U1, U2 and U3 (User Settings Modes)	52
Saving Settings in U1, U2 or U3 Mode (Save User Settings)	52
Features That Can Be Set Using the Multi Selector	55
Available Functions	55
Using the Flash (Flash Modes)	56
Using the Self-timer	59
Shooting Smiling Faces Automatically (Smile Timer)	60
Using Focus Mode	62
List of the Default Settings	64
Features That Can Be Set Using the Exposure Compensation Dial	66
Adjusting Brightness (Exposure Compensation)	66
Features That Can Be Set Using the Quick Menu Dial (Shooting Mode)	67
Available Quick Menu	68
Using the Quick Menu	69
Features That Can Be Set Using the MENU (Menu) Button (Shooting Mode)	70
Options Available in the Shooting Menu	71
Available Specialized Menu for U1, U2 or U3	73
Changing the Image Quality and Image Size	75
Available Image Quality	75
Available Image Size	77
Features Not Available in Combination	79
The Control Range of the Shutter Speed	82
Focusing on Subject	84
Using the Target Finding AF	84
Using Face Detection	85
Focus Lock	86
Autofocus	86
Speedlights (External Flash Unit)	87
How to Attach the Speedlight	87

Playback Features.....	91
Playback Zoom.....	91
Viewing Several Images (Thumbnail Playback and Calendar Display).....	92
Features That Can Be Set Using the MENU (Menu) button (Playback Mode).....	93
Available Playback Menus.....	93
Using the Screen for Selecting Images.....	95
Connecting the Camera to a TV, Computer, or Printer.....	96
Using ViewNX 2.....	97
Installing ViewNX 2.....	97
Transferring Images to the Computer.....	99
Viewing Images.....	100
Recording and Playing Back Movies.....	101
Recording Movies.....	101
Features That Can Be Set Using the Quick Menu Dial (Movie Mode, Movie Custom Setting Mode).....	105
Available Quick Menu.....	106
Features That Can Be Set Using the MENU (Menu) Button (Movie Mode, Movie Custom Setting Mode).....	107
Available Movie Menus.....	108
Playing Back Movies.....	109
General Camera Setup.....	110
The Setup Menu.....	110

Reference Section.....	001
Taking Pictures With Manual Focus.....	002
Using Easy Panorama (Shooting and Playing back)	003
Taking Pictures with Easy Panorama.....	003
Viewing Easy Panorama (Scroll).....	005
Using Panorama Assist.....	006
Playing Images in a Sequence.....	008
Editing Still Images.....	010
Editing Features.....	010
Quick Retouch: Enhancing Contrast and Saturation.....	012
D-Lighting: Enhancing Brightness and Contrast.....	012
Skin Softening: Softening Skin Tones	013
Filter Effects: Applying Digital Filter Effects	014
Small Picture: Reducing the Size of an Image.....	015
Black Border: Adding a Black Border to Pictures	015
Straighten: Compensating for Picture Slanting.....	016
NRW (RAW) Processing: Creating JPEG Images from NRW Images.....	016
Crop: Creating a Cropped Copy	018
Connecting the Camera to a TV (Viewing Images on a TV)	019
Connecting the Camera to a Printer (Direct Print)	021
Connecting the Camera to a Printer.....	021
Printing Individual Images	022
Printing Multiple Images.....	023
Editing Movies.....	026
Extracting Only the Desired Portions of the Movie	026
Saving a Frame from a Movie as a Still Picture	027
Quick Menu.....	028
Image Quality and Image Size.....	028
Movie Options	028
ISO Sensitivity	031
WB White Balance (Adjusting Hue)	033
Bracketing (Continuous Shooting While Changing the Exposure and White Balance).....	036
Picture Control (COOLPIX Picture Control) (Changing the Settings for Image Recording).....	038
Shooting Menu (P, S, A or M Mode).....	042
Custom Picture Control (COOLPIX Custom Picture Control).....	042
Metering.....	043
Continuous Shooting.....	044
AF Area Mode	047
Autofocus Mode.....	051

Refer to the *Reference Manual* CD-ROM for pages indicated with .

Flash Exp. Comp.	51
Noise Reduction Filter.....	52
Built-in ND Filter.....	52
Distortion Control.....	53
Active D-Lighting.....	53
Zoom Memory.....	54
Startup Zoom Position.....	54
M Exposure Preview.....	55
Focus-coupled Metering.....	55
Commander Mode.....	56
Specialized Menu for U1, U2 or U3.....	58
Movie and Movie Custom Setting Menus.....	58
Shooting Mode (Movie Custom Setting Only).....	58
Custom Picture Control (Movie Custom Setting Only).....	58
Autofocus Mode.....	59
Built-in ND Filter (Movie Custom Setting Only).....	59
Wind Noise Reduction.....	59
The Playback Menu.....	60
Print Order (Creating a DPOF Print Order).....	60
Slide Show.....	62
Delete.....	63
Protect.....	64
Rotate Image.....	64
Voice Memo.....	65
Copy (Copy Between Internal Memory and Memory Card).....	66
Sequence Display Options.....	67
Choose Key Picture.....	67
The Setup Menu.....	68
Welcome Screen.....	68
Time Zone and Date.....	69
Monitor Settings.....	71
Print Date (Imprinting Date and Time on Pictures).....	72
Self-timer: After Release.....	73
Vibration Reduction.....	73
AF Assist.....	74
ISO Sensitivity Step Value.....	74
Digital Zoom.....	75
Zoom Speed.....	76
Fixed Aperture.....	76
Sound Settings.....	77
Record Orientation.....	77
Rotate Tall.....	78

Refer to the *Reference Manual* CD-ROM for pages indicated with .

Table of Contents

Auto Off	78
Format Memory/Format Card.....	79
Language.....	79
TV Settings.....	80
External Mic Sensitivity.....	80
Customize Command Dials.....	81
Command Dial Rotation.....	81
Multi Selector Right Press	81
Delete Button Options	82
AE/AF Lock Button.....	82
Fn1 + Shutter Button.....	83
Fn1 + Command Dial/Fn1 + Selector Dial	84
Fn1 Guide Display.....	85
Fn2 Button.....	85
Customize My Menu.....	86
Reset File Numbering.....	87
GPS Options	87
Eye-Fi Upload	89
MF Distance Indicator Units.....	90
Reverse Indicators	90
Flash Control.....	90
Reset All	91
Firmware Version.....	94
Error Messages	95
File and Folder Names.....	100
Optional Accessories	102
Shooting with Remote Control ML-L3	104

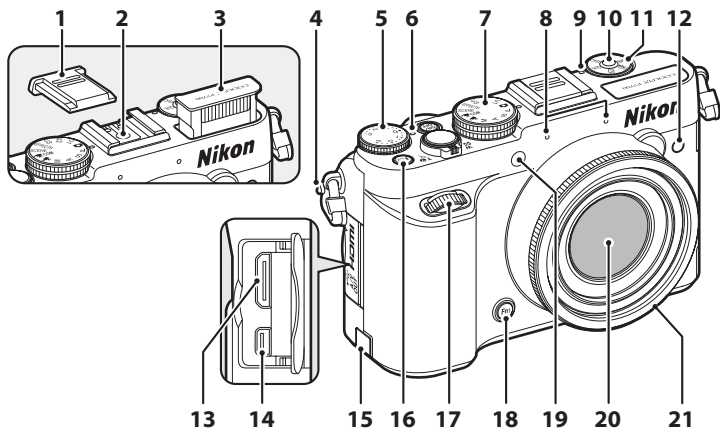
Technical Notes and Index 1

Troubleshooting.....	2
Caring for the Products	9
The Camera	9
The Battery.....	10
The Battery Charger	11
The Memory Cards.....	12
Caring for the Camera	13
Cleaning	13
Storage.....	13
Specifications	14
Supported Standards	17
Index.....	19

Refer to the *Reference Manual* CD-ROM for pages indicated with .

Parts of the Camera and Main Functions

The Camera Body

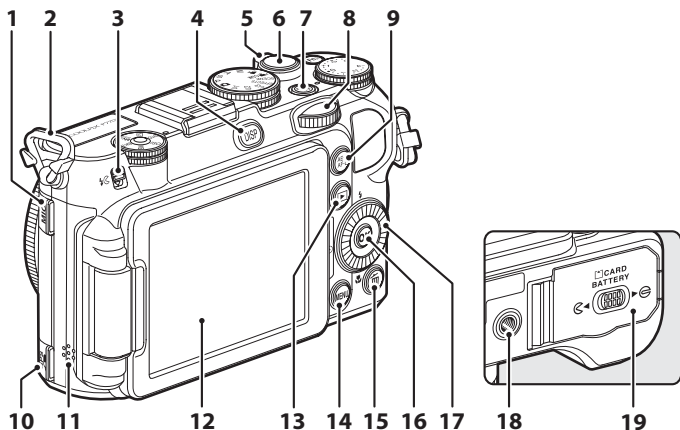


Parts of the Camera and Main Functions

1	Accessory Shoe Cover BS-1.....	87
2	Accessory shoe	87
3	Flash.....	56
4	Eyelet for camera strap.....	7
5	Exposure compensation dial	66
6	Exposure compensation dial mark....	66
7	Mode dial.....	26
8	Microphone (stereo)	94, 101
9	Quick menu dial mark.....	67, 105
10	Quick menu button.....	67, 105
11	Quick menu dial.....	67, 105
12	Infrared receiver (for an optional Remote Control ML-L3)	55, 104

13	HDMI mini connector (Type C)	96
14	USB/Audio video connector.....	96
15	Power connector cover (for an optional AC Adapter).....	103
16	Fn2 (function 2) button.....	113
17	Sub-command dial.....	3, 5, 48, 50
18	Fn1 (function 1) button.....	4, 113
19	Self-timer lamp.....	59
20	AF-assist illuminator	111
21	Lens	
21	Lens ring.....	103

The Camera Body



1	External microphone connector.....	104
2	Eyelet for camera strap	7
3	(flash pop-up) control.....	56
4	DISP (display) button	9, 12
5	Zoom control.....	29
	W : Wide	29
	T : Tele.....	29
	: Thumbnail playback.....	92
	: Playback zoom.....	91
	: Help	35
6	Shutter-release button.....	4, 30
7	Power switch/power-on lamp.....	23
8	Main command dial.....	3, 5, 48, 50
9	(AE-L/AF-L) button	4, 113

10	Accessory terminal	88, 102
11	Speaker	94, 109, 111
12	Monitor	8, 9, 12
13	(playback) button.....	32
14	MENU (menu) button	70, 107
15	(delete) button.....	33, 109, 112
16	(apply selection) button	10
17	Rotary multi selector (multi selector)*	3, 5, 55
18	Tripod socket	
19	Battery-chamber/ memory card slot cover	18, 20

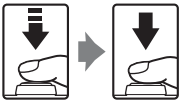
* The “rotary multi selector” is also referred to as the “multi selector” in this manual.

Principle Functions of the Controls

For Shooting

Control	Main Function	
 Mode dial	Change the shooting mode.	26
 Zoom control	Rotate toward T (Q) (telephoto zoom position) to zoom in, and rotate toward W (R) (wide-angle position) to zoom out.	29
 Rotary multi selector	- While the shooting screen is displayed, display the setting screen for  (flash mode) by pressing up () for  (self-timer/smile timer/remote control) by pressing left () for  (focus mode) by pressing down () and for  (AF area mode) by pressing right () - While the setting screen is displayed, select items using , , , or , or by rotating the rotary multi selector. - While the setting screen is displayed, apply the selection by pressing the  button.	55 10 10
 Main command dial	- Set the flexible program (in shooting mode P) or shutter speed (in shooting mode S or M). - While the setting screen is displayed, select an item.	48, 50 10
 Sub-command dial	- Set the aperture value (in shooting mode A or M). - While the setting screen is displayed, move the menu level. - While the quick menu is displayed, select an item.	48, 50 10 69

The Camera Body

Control	Main Function	
 Quick menu dial, Quick menu button	Display or exit the quick menu.	67, 105
 MENU (menu) button	Display and hide the menu.	10
 Shutter-release button	When pressed halfway (i.e., if you stop pressing when you feel resistance slightly): Set focus and exposure. When pressed all the way (i.e., if you press the button all the way down): Release the shutter.	30
 Exposure compensation dial	Adjust the brightness (exposure compensation).	66
 AE-L AF-L (AE-L/AF-L) button	Lock the exposure or focus.	113
 Fn1 (function 1) button	• Combined with the zoom control: Change the zoom lens focal length. • Combined with the shutter-release button: Shoot with the assigned function setting. • Combined with the command dial: Change the assigned function setting. • Combined with the rotary multi selector: Change the assigned function setting.	72 113 113 113
 Fn2 (function 2) button	Display the setting menu of pre-assigned function.	113

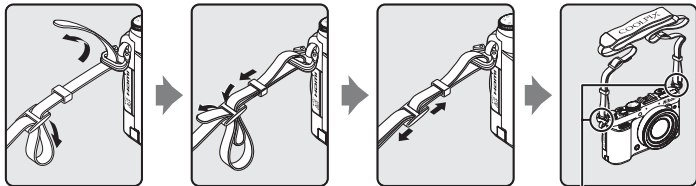
Control	Main Function	
 DISP (display) button	Switch the information displayed on the monitor screen.	9
 Playback button	Play back images.	32
 Delete button	Delete the last image that was saved.	33

For Playback

Control	Main Function	
 Playback button	- When the camera is turned off, press and hold this button to turn the camera on in playback mode. - Return to shooting mode.	23 32
 Zoom control	- Enlarge the image when rotated toward T (Q); display image thumbnail or the calendar when rotated toward W (checkered flag). - Adjust the volume for voice memo and movie playback.	91, 92 94, 109
 Rotary multi selector	- While the playback screen is displayed, change the displayed image by pressing up (▲), left (◀), down (▼), right (▶), or by rotating the rotary multi selector. - While the setting screen is displayed, select an item by pressing ▲, ▼, ◀ or ▶, or by rotating the rotary multi selector. - Move the area to be enlarged.	32 10 91
 Main command dial	- Select pictures and date. - Switch the magnification of an enlarged image.	32, 92 91
 Sub-command dial		

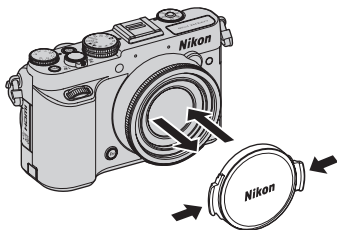
Control	Main Function	
 Apply selection button	• Display individual images of a sequence in full-frame. • Scroll an image recorded with Easy panorama. • Play back movies. • Switch from image thumbnail or zoomed image display to full-frame playback mode. • While the setting screen is displayed, apply the selection.	32,  8 41,  5 109 92 10
 MENU (menu) button	Display and hide the menu.	10
 Delete button	Delete images.	33
 DISP (display) button	Switch the information displayed on the monitor screen.	9
 Shutter-release button	Return to shooting mode.	–

Attaching the Camera Strap



Attach the strap at two places.

Attaching and Detaching the Lens Cap



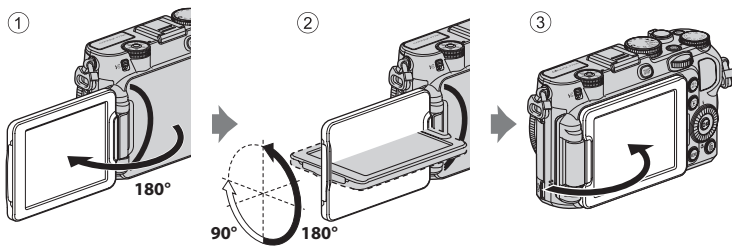
✓ Lens Cap

- Remove the lens cap before you shoot a picture.
- At times when you are not shooting pictures such as when the power is off, or while you are carrying the camera, attach the lens cap to the camera to protect the lens.

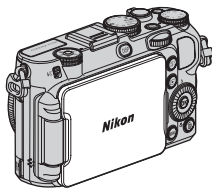
Opening and Adjusting the Angle of the Monitor

The orientation and tilt of the monitor on the camera can be changed. This is useful when shooting with the camera in a high or a low position, or when taking self-portraits.

For normal shooting, fold the monitor screen against the camera face out (③).



When you are not using or carrying the camera, fold the monitor with the screen facing the camera body to prevent scratches or contamination.



✓ Notes on Monitor

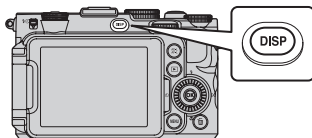
- When moving the monitor, do not apply excessive force and turn slowly within the monitor's adjustable range so that the connection will not be damaged.
- When the monitor is turned with a cable connected to the external microphone connector or accessory terminal, the monitor may catch on the cable or cover. Do not apply excessive force to the cable or to the connector of the camera.

📖 More Information

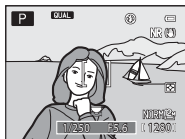
See "Closing the Monitor and Power" (📖23) for more information.

Switching the Monitor Screen (DISP Button)

To switch the information displayed on the monitor screen during shooting and playback, press the **DISP** (display) button.



For Shooting



Display information

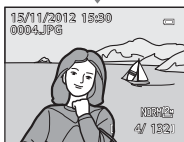
Display the picture and the shooting information.



Information hidden

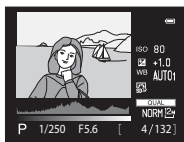
Display the picture only.

For Playback



Display photo information

Display the picture and photo information.



Tone level information* (excluding movies)

Display a histogram, tone level and shooting information.



Information hidden

Display the picture only.

* See 15 for more information on tone level information.

Virtual Horizon, Histogram and Framing Grid Displays for Shooting

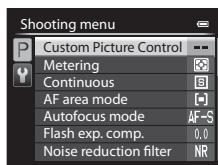
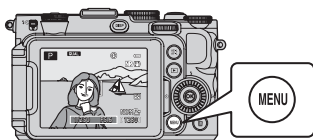
- The display options for the monitor screen can be changed in **Photo info** of **Monitor settings** in the setup menu (110). A virtual horizon, histogram and framing grid are available as the display options (12).
- The setting for virtual horizon display can be changed in **Virtual horizon display** of **Monitor settings** in the setup menu. The default setting is **Circle**.

Basic Menu Operations

Once the menu is displayed, various settings can be changed.

1 Press the MENU button.

- The menu that matches the status of the camera, such as shooting or playback mode, is displayed.



2 Use the rotary multi selector to select a menu item.

- ▲ or ▼: Select an item above or below. An item can also be selected by rotating the multi selector.
- ◀ or ▶: Select an item on the left or right, or move the menu level.
- OK: Apply a selection. Pressing ▶ also applies a selection.
- See 11 for more information on how to switch tabs.



Apply selection

3 After completing the settings, press the MENU button or shutter-release button.

- Press the shutter-release button to display the shooting screen.



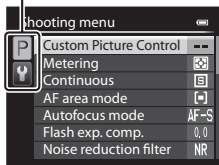
Note on the Command Dial Operation When Menus are Displayed

Rotating the main command dial when menus are displayed allows you to select an item. Rotating the sub-command dial allows you to move the menu level.

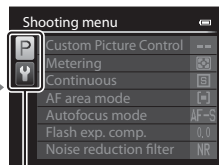
Switching Among Menu Tabs

To display a different menu, such as the setup menu (📖110), use the multi-selector to switch to another tab.

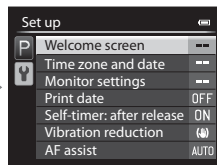
Tabs



Press ◀ to move to the tab.



Press ▲ or ▼ to select the tab, and press the OK button or ▶ to apply the selection.



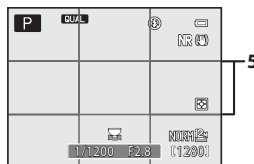
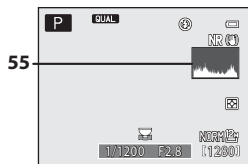
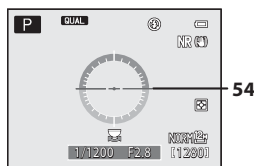
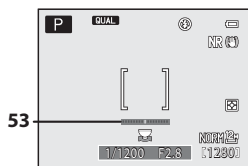
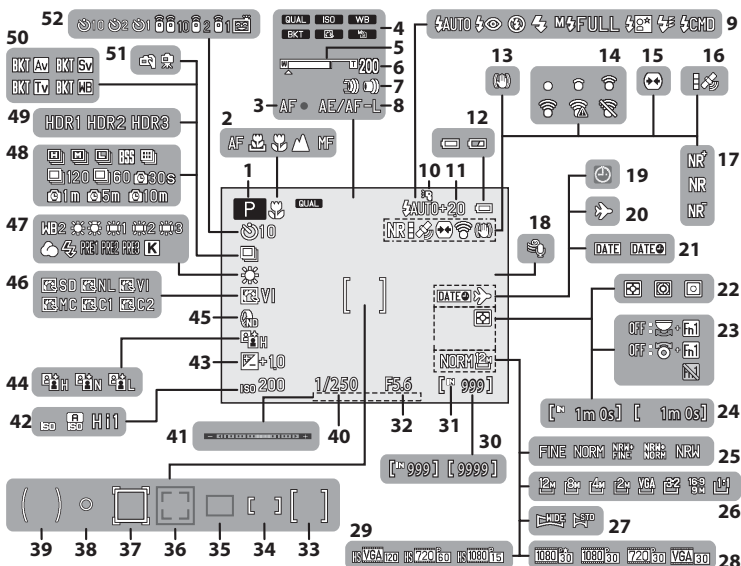
Tab Types

For Shooting	For Playback
P tab: Displays the settings available for the current shooting mode (📖27). Depending on the current shooting mode, the tab icon that is displayed will be different. In 📷 (auto) mode, only Y tab is displayed. U1/U2/U3 tab: Displays the settings for the specialized menu in U1, U2 or U3 mode (📖52). Y tab: Displays the setup menu, where you can change general settings.	P tab: Displays the settings available for the playback mode.

Monitor Screen

The information that is displayed on the monitor during shooting and playback changes depending on the camera's settings and state of use. Press the **DISP** (display) button to hide or show the information on the monitor (📖9).

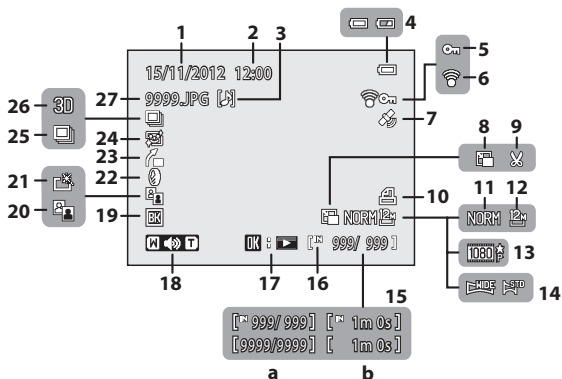
For Shooting



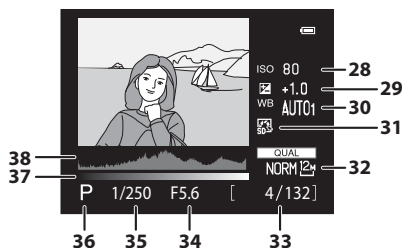
1	Shooting mode.....	26, 27	32	Aperture value	48
2	Focus mode.....	63	33	Focus area (for center)	55, 64, 71, 86
3	Focus indicator	30	34	Focus area (for manual)	38, 39, 43, 55, 64, 71
4	Quick menu dial indicator.....	67, 105	35	Focus area (for auto, target finding AF)	30, 31, 55, 64, 71, 84
5	Zoom indicator	29, 63	36	Focus area (for face detection, pet detection)	42, 55, 60, 64, 71, 85
6	Zoom memory	72	37	Focus area (for subject tracking)	55, 64, 71
7	Zoom speed setting.....	111	38	Spot metering area.....	71
8	AE/AF-L indicator.....	43, 113, 	39	Center-weighted area	71
9	Flash mode	57	40	Shutter speed.....	48
10	Speedlight.....	87	41	Exposure indicator	50
11	Flash exp. comp.	71	42	ISO sensitivity	68, 106
12	Battery level indicator	22	43	Exposure compensation value.....	66
13	Vibration reduction icon	111	44	Active D-Lighting.....	72
14	Eye-Fi communication indicator	114, 	45	Built-in ND filter.....	72
15	Distortion control	72	46	COOLPIX Picture Control.....	68, 106
16	GPS reception	114, 	47	White balance	68, 106
17	Noise reduction filter.....	71	48	Continuous shooting mode.....	42, 71
18	Wind noise reduction.....	108	49	Backlighting (HDR)	40
19	"Date not set" indicator.....	25, 110	50	Auto bracketing	68
20	Travel destination indicator.....	110		Hand-held/Tripod.....	38
21	Print date.....	110	51	Self-timer	59
22	Metering	71		Remote control	55
23	Fn1 guide display.....	4, 113	52	Smile timer	60
24	Movie length	101, 		Pet portrait auto release	42
25	Image quality	75	53	Virtual horizon (bars).....	110, 
26	Image size.....	75, 77	54	Virtual horizon (circle)	110, 
27	Easy panorama	41	55	View/show histograms	110, 
28	Movie options (normal speed movies)	101, 106	56	View/show framing grid.....	110, 
29	Movie options (HS movies).....	101, 106			
30	Number of exposures remaining (still pictures).....	22, 78			
31	Internal memory indicator.....	22			

For Playback

Full-frame display (32)



Tone level information display¹ (9)



1	Date of recording.....	24	20	D-Lighting icon	93
2	Time of recording	24	21	Quick retouch icon	93
3	Voice memo indicator	94	22	Filter effects icon	93
4	Battery level indicator	22	23	Straighten indicator	94
5	Protect icon	93	24	Skin softening icon	93
6	Eye-Fi communication indicator	114, 	25	Sequence display (when Individual pictures is set)	 8
7	Recorded GPS information indicator	114	26	3D image indicator	43
8	Small picture	93, 	27	File number and type	 100
9	Crop	91, 	28	ISO sensitivity	68
10	Print order icon	93	29	Exposure compensation value	66
11	Image quality	75	30	White balance	68
12	Image size	77	31	COOLPIX Picture Control	68
13	Movie options	101, 106	32	Image quality/Image size	75
14	Easy panorama indicator	41	33	Current image number/ total number of images	32
15	(a) Current image number/total number of images	32	34	Aperture value	31
	(b) Movie length	109	35	Shutter speed	31
16	Internal memory indicator	32	36	Shooting mode ²	27
	Easy panorama playback guide	 5	37	Tone level ³	
17	Sequence playback guide	 8	38	Histogram ⁴	
	Movie playback guide	109			
18	Volume indicator	94, 109			
19	Black border indicator	94			

¹ You can check for loss of contrast detail in highlights and shadows from the histogram that is displayed, or the flashing display for each tone level. These provide guidelines when adjusting the picture brightness with functions such as exposure compensation.

² **P** is displayed when the shooting mode , **SCENE, EFFECTS** or **P** is selected.

³ The tone level indicates the brightness level. When the tone level to check is selected by pressing the rotary multi selector  or , the area of the picture that corresponds to the selected tone level flashes.

⁴ A histogram is a graph showing the distribution of tones in the image. The horizontal axis corresponds to pixel brightness, with dark tones to the left and bright tones to the right. The vertical axis shows the number of pixels.

The Basics of Shooting and Playback

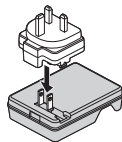
Preparation 1 Charge the Battery

1 Prepare the included Battery Charger MH-24.

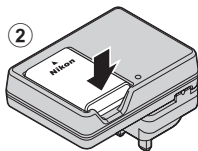
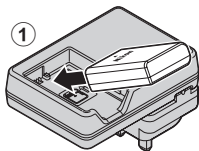
If a plug adapter* is included with your camera, attach the plug adapter to the plug on the Battery Charger. Push the plug adapter firmly until it is securely held in place. Once the two are connected, attempting to forcibly remove the plug adapter could damage the product.

* The shape of the plug adapter varies according to the country or region in which the camera was purchased.

The Battery Charger comes with the plug adapter attached in Argentina and Korea.

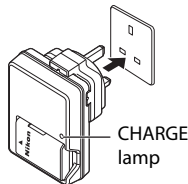


2 While pushing in the battery (①), set it into the Battery Charger (②).



3 Plug the Battery Charger into an electrical outlet.

- CHARGE lamp starts flashing when charging starts.
- A fully-exhausted battery charges in about 1 hour and 30 minutes.
- When charging is complete, the CHARGE lamp stops flashing.
- See "Understanding CHARGE Lamp" (p.17).



4 When charging is complete, remove the battery and then disconnect the Battery Charger from the electrical outlet.

Understanding CHARGE Lamp

Status	Description
Flashes	The battery is charging.
On	The battery is fully charged.
Flashes quickly	- The battery is set incorrectly. Disconnect the Battery Charger from the electrical outlet, remove the battery, and then reset the battery to lie flat in the Battery Charger. - The ambient temperature is not suited to charging. Charge the battery indoors with an ambient temperature of 5°C to 35°C (41°F to 95°F). - There is a problem with the battery. Immediately disconnect the Battery Charger from the electrical outlet, and stop charging. Take the battery and Battery Charger to your retailer or Nikon-authorized service representative.

Notes on Battery Charger

- Be sure to read and follow the warnings of “For Your Safety” (vi) thoroughly before using the Battery Charger.
- Be sure to read and follow the warnings for “The Battery Charger” (11) thoroughly before using the battery.

Notes on Battery

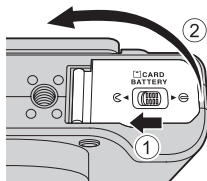
- Be sure to read and follow the warnings of “For Your Safety” (vi) thoroughly before using the battery.
- Be sure to read and follow the warnings for “The Battery” (10) thoroughly before using the battery.

AC Power Supply

- If the AC Adapter EH-5b and the Power Connector EP-5A (available separately) (103) are used, power is supplied to the camera from an electrical outlet, enabling taking and playing back pictures.
- Do not, under any circumstances, use an AC Adapter other than the EH-5b or a Power Connector other than the EP-5A. Failure to observe this precaution could result in overheating or damage to the camera.

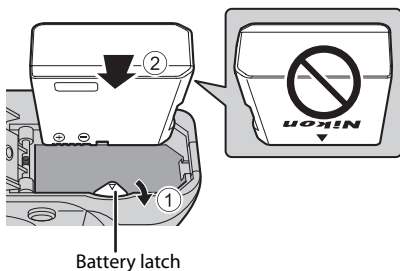
Preparation 2 Insert the Battery

- 1 Open the battery-chamber/memory card slot cover.



- 2 Insert the battery.

- Use the battery to push the orange battery latch in the direction shown (①), and fully insert the battery (②).
- When the battery is inserted correctly, the battery latch will lock the battery in place.

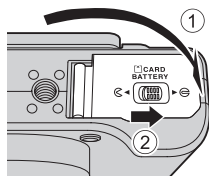


✓ Inserting the Battery Correctly

Inserting the battery upside down or backwards could damage the camera. Be sure to confirm that the battery is in the correct orientation.

- 3 Close the battery-chamber/memory card slot cover.

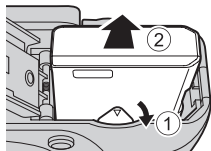
- While the battery-chamber/memory card slot cover is open, the camera cannot be turned on.



Removing the Battery

Before opening the battery-chamber/memory card slot cover, turn the camera off (23) and confirm that the power-on lamp and the monitor are off.

To eject the battery, open the battery-chamber/memory card slot cover and push the orange battery latch in the direction shown (①). Then, remove the battery straight (②).

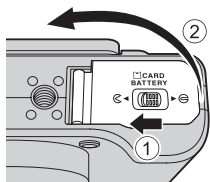


High Temperature Caution

The camera, battery, and memory card may be hot immediately after using the camera. Observe caution when removing the battery or memory card.

Preparation 3 Insert a Memory Card

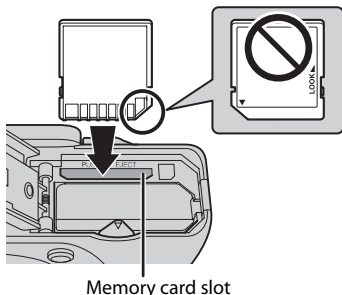
- 1 Confirm that the power-on lamp and the monitor are turned off and open the battery-chamber/memory card slot cover.
 - Be sure to turn off the camera before opening the cover.



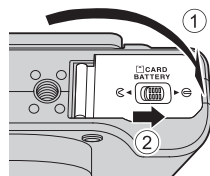
- 2 Insert the memory card.
 - Slide the memory card until it clicks into place.

✓ Inserting the Memory Card Correctly

Inserting the memory card upside down or backwards could damage the camera or the memory card. Be sure to confirm that the memory card is in the correct orientation.



- 3 Close the battery-chamber/memory card slot cover.



✓ Formatting a Memory Card

- The first time you insert a memory card that has been used in another device into this camera, be sure to format it with this camera.
- **All data stored on a memory card is permanently deleted when the card is formatted.** Be sure to make copies of any data you wish to keep before formatting the memory card.
- To format a memory card, insert the memory card into the camera, press the **MENU** button and select **Format card** from the setup menu (110).

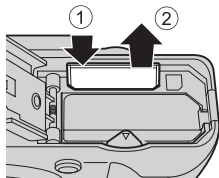
✓ Note on Memory Cards

Refer to the documentation included with the memory card, as well as “The Memory Cards” (12) in “Caring for the Products”.

Removing Memory Cards

Before opening the battery-chamber/memory card slot cover, turn the camera off and confirm that the power-on lamp and the monitor are off.

Press the memory card in lightly with your finger (①) to partially eject it, and then pull it out straight (②).



✓ High Temperature Caution

The camera, battery, and memory card may be hot immediately after using the camera. Observe caution when removing the battery or memory card.

Internal Memory and Memory Cards

Camera data, including images and movies, can be saved in either the camera's internal memory (approximately 86 MB) or on a memory card. To use the camera's internal memory for shooting or playback, first remove the memory card.

Approved Memory Cards

The following Secure Digital (SD) memory cards have been tested and approved for use in this camera.

- When recording a movie onto a memory card, a memory card with an SD speed class of Class 6 or higher is recommended. If the transfer speed of the card is slow, the movie recording may end unexpectedly.

	SD memory cards	SDHC memory cards ²	SDXC memory cards ³
SanDisk	2 GB ¹	4 GB, 8 GB, 16 GB, 32 GB	64 GB, 128 GB
TOSHIBA	2 GB ¹	4 GB, 8 GB, 16 GB, 32 GB	64 GB
Panasonic	2 GB ¹	4 GB, 8 GB, 16 GB, 32 GB	64 GB
Lexar	-	4 GB, 8 GB, 16 GB, 32 GB	64 GB, 128 GB

- Before using a card reader or similar device, check that the device supports 2 GB cards.
- SDHC-compliant. Before using a card reader or similar device, check that the device supports SDHC.
- SDXC-compliant. Before using a card reader or similar device, check that the device supports SDXC.



- Contact the manufacturer for details on the above cards.

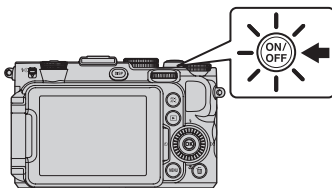
Step 1 Turn the Camera On

1 Open the monitor and remove the lens cap.

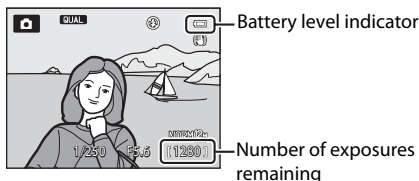
- See “Opening and Adjusting the Angle of the Monitor” (📖8) for more information.
- See “Attaching the Camera Strap” (📖7) for more information.

2 Press the power switch to turn on the camera.

- **If you are turning the camera on for the first time, see “Setting the Display Language, Date, and Time” (📖24).**
- The lens extends, and the monitor is turned on.



3 Check the battery level and number of exposures remaining.



Battery Level

Display	Description
	Battery level high.
	Battery level low. Prepare to charge or replace the battery.
Battery exhausted.	Cannot take pictures. Charge or replace the battery.

Number of Exposures Remaining

The number of exposures remaining is displayed.

- When a memory card is not inserted, is displayed and pictures are recorded to the internal memory (approx. 86 MB).
- The number of pictures that can be stored depends on the remaining capacity of the internal memory or memory card, the image quality, and the image size (📖78).
- The number of exposures remaining shown in the illustration differs from the actual value.

Turning the Camera On and Off

- When the camera is turned on, the power-on lamp (green) lights and the monitor is turned on (the power-on lamp turns off when the monitor is turned on).
- To turn off the camera, press the power switch. Both the monitor and the power-on lamp are turned off.
- To turn on the camera in playback mode, press and hold the  (playback) button. At this time, the lens does not extend.



Closing the Monitor and Power

- When the monitor is closed with the screen facing inward, the power cannot be turned on even if the power switch or  button is pressed.
- When the monitor is closed with the screen facing inward while the power is on, the camera enters standby mode and the power lamp flashes on and off. After the monitor is in the closed position for 3 minutes, the power turns off. Opening the monitor when the camera is in standby mode causes it to switch to the shooting mode.
- When the monitor is closed while movie recording or interval timer shooting, recording will end.
- When the camera is connected to a TV, PC or printer, the camera will not enter standby mode when the monitor is closed.



Power Saving Function (Auto Off)

If no operations are performed for a while, the monitor will turn off, the camera will enter standby mode, and the power-on lamp will flash. If no operations are performed for another 3 minutes, the camera will turn off automatically.

- To turn on the monitor again in standby mode, perform either one of the following operations.
 - Press the power switch, shutter-release button or the  button.
 - Rotate the mode dial.
- The time that elapses before the camera enters standby mode can be changed using the **Auto off** setting in the setup menu ( 110).
- By default, the camera enters standby mode in about 1 minute when you are using shooting mode or playback mode.
- If you are using the AC Adapter EH-5b (available separately), the camera enters standby mode after 30 minutes. This setting cannot be changed.



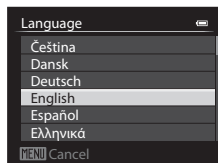
Monitor Display

Press the **DISP** button to switch between showing and hiding the photo information or shooting information that is displayed on the monitor screen ( 9).

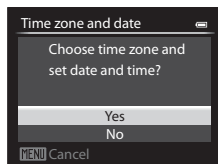
Setting the Display Language, Date, and Time

Dialogs for language selection and camera clock setting are displayed the first time the camera is turned on.

- 1 Press the multi selector **▲** or **▼** to choose the desired language and press the **OK** button.

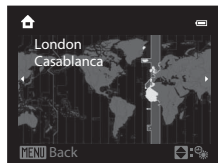


- 2 Press **▲** or **▼** to choose **Yes** and press the **OK** button.

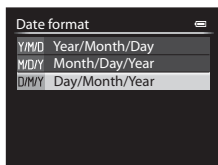


- 3 Press **◀** or **▶** to select your home time zone (Time zone), and press the **OK** button.

- In regions where daylight saving time applies, press **▲** to enable the daylight saving time function.  will be displayed. To disable the daylight saving time function, press **▼**.

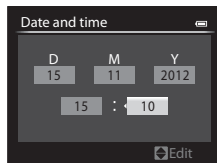


- 4 Press **▲** or **▼** to choose the date display order and press the **OK** button or **▶**.



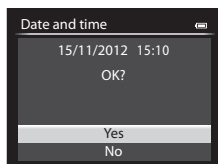
5 Press ▲, ▼, ◀ or ▶ to set date and time, and press the **OK** button.

- Choose an item: Press ▶ or ◀ (selected in the following order: **D** (day) → **M** (month) → **Y** (year) → **hour** → **minute**).
- Set the contents: Press ▲ or ▼. Date and time can also be set by rotating the multi selector or main command dial.
- Confirm the settings: Select the **minute** field and press the **OK** button or ▶.



6 Press ▲ or ▼ to choose **Yes** and press the **OK** button.

- After finishing the setting, the lens extends slightly and the shooting screen is displayed.



The Clock Battery

- The camera's clock is powered by a backup battery that is separate from the camera's main battery.
- The backup battery charges after about 10 hours of charging when the main battery is inserted into the camera or when the camera is connected to an optional AC Adapter, and can store the set date and time for several days.
- If the camera's backup battery becomes exhausted, the date and time setting screen is displayed when the camera is turned on. Set the date and time again. See step 2 of "Setting the Display Language, Date, and Time" (124) for more information.

Changing the Language Setting and the Date and Time Setting

- You can change these settings using the **Language** and **Time zone and date** settings in **Y** setup menu (110).
- In the **Time zone** setting of **Time zone and date** in **Y** setup menu, when the daylight saving time function is enabled, the camera's clock is set forward by one hour, and when disabled, set back by one hour.
- If you exit without setting the date and time,  flashes when the shooting screen is displayed. Use the **Time zone and date** setting in the setup menu to set the date and time.

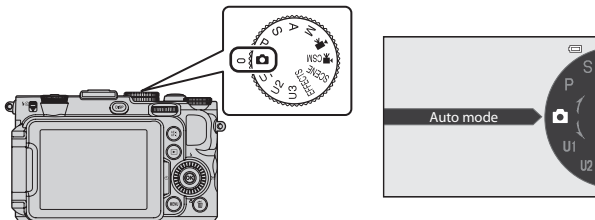
Imprinting the Shooting Date in Printed Images

- Set the date and time before shooting.
- You can imprint the shooting date in images as they are captured by setting **Print date** in the setup menu.
- If you want the shooting date to be printed without using the **Print date** setting, print using the ViewNX 2 software (197).

Step 2 Select a Shooting Mode

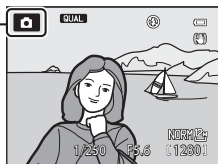
Rotate the mode dial to select the shooting mode.

- The following describes how to take pictures in  (auto) mode as an example. Rotate the mode dial to .



- The camera switches to  (auto) mode and the shooting mode icon changes to .

Shooting mode icon



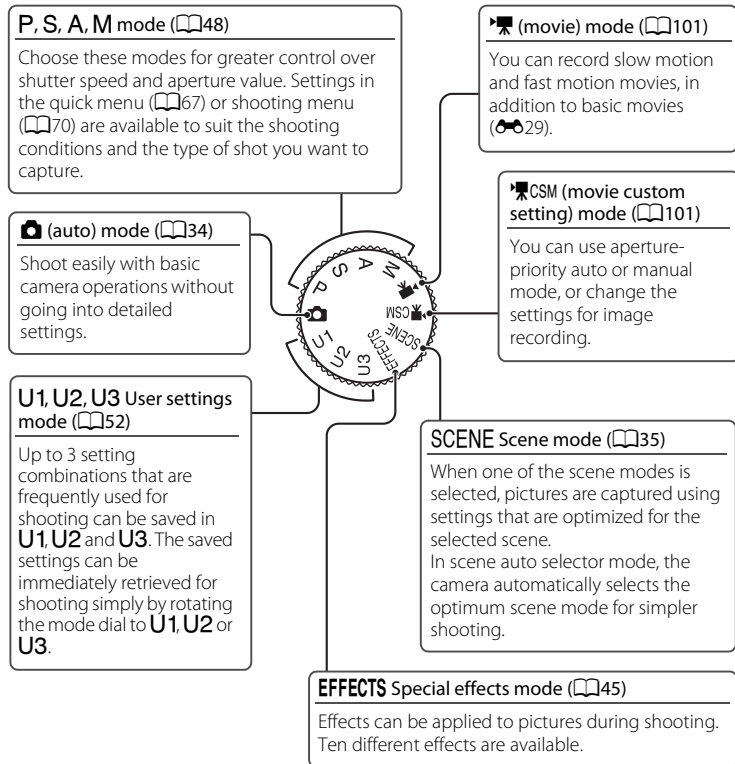
- See “Monitor Screen” (📖12) for more information.



Note on the Flash

In situations where a flash is needed, such as in dark locations or when the subject is backlit, be sure to raise the flash (📖56).

Available Shooting Modes



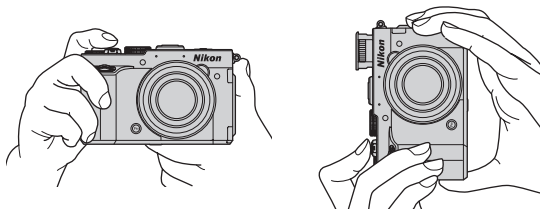
Changing the Settings When Shooting

- Features That Can Be Set Using the Multi Selector → 155
- Exposure Compensation → 166
- Features That Can Be Set Using the Quick Menu Dial → 167, 1105
- Features That Can Be Set Using the **MENU** (Menu) Button
 - Shooting menu → 170, 1107
 - Setup menu → 1110

Step 3 Frame a Picture

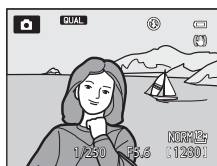
1 Ready the camera.

- Keep your fingers, hair, strap and other objects away from the lens, flash, AF-assist illuminator and microphone.
- To shoot in the “tall” orientation, hold the camera so that the flash is above the lens.



2 Frame the picture.

- Point the camera at the subject.



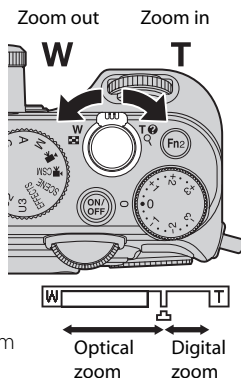
Using a Tripod

- In the following situations, use of a tripod is recommended to avoid the effects of camera shake:
 - When shooting in a dark location with the flash lowered, or in a mode in which flash is disabled
 - When shooting in the telephoto zoom position
- To take a picture with the camera attached to a tripod, set **Vibration reduction** in the setup menu (📖110) to **Off**.

Using the Zoom

Rotate the zoom control to activate the optical zoom.

- To zoom in so that the subject fills a larger area of the frame, rotate toward **T** (telephoto zoom position).
- To zoom out so that the area visible increases in the frame, rotate toward **W** (wide-angle position).



- Amount of zoom is displayed at the top of the monitor screen when the zoom control is rotated.
- Rotating the zoom control toward **T** at the maximum optical zoom ratio triggers the digital zoom and the digital zoom can magnify by 4x beyond the maximum magnification of the optical zoom.

Digital Zoom and Interpolation

When the digital zoom is used, the image quality starts to deteriorate if the zoom position is increased beyond the  position on the zoom bar. The  position moves to the right as the image size ( 77) becomes smaller.

- Using **Digital zoom** in the setup menu ( 110), it is possible to restrict the magnification of the digital zoom to a range where images do not deteriorate, or to set the digital zoom so that it does not operate.

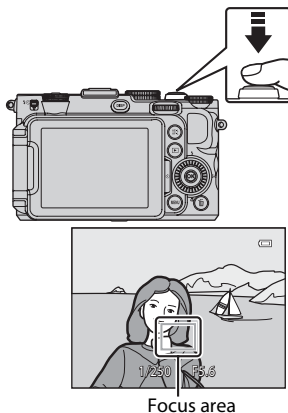
More Information

- Zoom memory →  72
- Startup zoom position →  72
- Zoom speed →  111

Step 4 Focus and Shoot

1 Press the shutter-release button halfway to adjust the focus.

- “Pressing halfway” is the action of pressing the shutter-release button slightly until you feel resistance and then holding in that position.
- When the subject is in focus, the focus area or focus indicator (📖12) lights in green. If the focus area or focus indicator flashes in red, the subject is out of focus. Press the shutter-release button halfway again.
- See “Focus and Exposure” (📖31) for more information.



2 Press the shutter-release button all the way to take a picture.

- “Pressing all the way” is the action of pressing the shutter-release button the rest of the way down.



✓ Note on Recording Images and Saving Movies

The indicator showing the number of exposures remaining or the indicator showing the maximum movie length flashes while images are being recorded or while a movie is being saved. **Do not open the battery-chamber/memory card slot cover or remove the battery or memory card while an indicator is flashing.** Doing this could result in loss of data, or in damage to the camera or the memory card.

📎 AF-assist Illuminator

In dark places, the AF-assist illuminator (📖111) may light when the shutter-release button is pressed halfway.

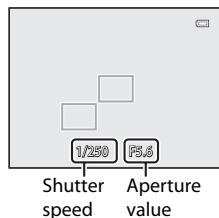
📎 To Make Sure You Do Not Miss a Shot

If you are concerned that you might miss a shot, press the shutter-release button all the way without first pressing it halfway.

Focus and Exposure

When the shutter-release button is pressed halfway, the camera sets the focus and exposure (combination of shutter speed and aperture value). The focus and exposure remain locked while the shutter-release button is pressed halfway.

- When the digital zoom is in effect, the camera focuses on the subject at the center of the frame, and the focus area is not displayed. When the subject is in focus, the focus indicator lights in green.
- The camera may not be able to focus on certain subjects. See “Autofocus” (86) for more information.
- In auto mode, the camera automatically selects the areas containing the subject closest to the camera out of 9 focus areas. When the subject is in focus, the focus areas that are in focus (up to 9 areas) light in green.



- When **P**, **S**, **A**, **M**, **U1**, **U2**, **U3** or **EFFECTS** (special effects) mode is selected, the areas to be used for focusing can be set using **AF area mode** (71) in the shooting menu.
- The areas to be used for focusing in scene mode vary depending on the selected scene (36).

✓ The Subject Is Too Close to the Camera

If the camera does not focus, try shooting with  (close range only),  (macro close-up) (63) in the focus mode, or **Close-up** (38) scene mode.

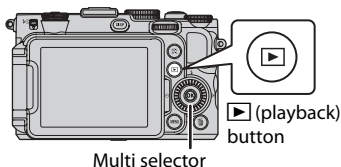
More Information

See “Focusing on Subject” (84) for more information.

Step 5 Play Back Images

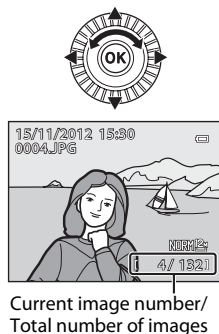
1 Press the (playback) button.

- When you switch from shooting mode to playback mode, the last image saved will be displayed in full-frame playback mode.



2 Use the multi selector to view previous or next images.

- To view previous images:  or 
- To view next images:  or 
- Images can also be selected by rotating the multi selector or command dial.
- To play back images that are saved in the internal memory, remove the memory card.  is displayed around "Current image number/total number of images" on the playback screen.
- To return to shooting mode, press the  button again or press the shutter-release button.

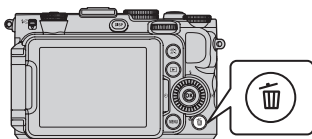


Viewing Pictures

- Press the **DISP** button to switch between showing and hiding the photo information or shooting information that is displayed on the monitor screen (9).
- When the orientation of the camera is changed during playback, the displayed images are rotated automatically.
- Pictures taken in "tall" orientation will be rotated automatically (111).
- The orientation of an image can be changed using **Rotate image** in the playback menu (93).
- Press the  button to display a sequence of images shot continuously as individual images. Press  on the multi selector to return to the original display (see 8 for more information on the sequence display).
- Images may be displayed at low resolution immediately after switching to the previous or next image.

Step 6 Delete Unwanted Images

- 1 Press the  button to delete the image currently displayed on the monitor.



- 2 Press the multi selector  or  to select **Yes** and press the .

- Deleted images cannot be recovered.
- To cancel, press  or  to select **No** and press the  button.



Notes on Deletion

- Deleted images cannot be recovered. Transfer important images to a computer before deleting them.
- Protected images (93) cannot be deleted.
- When pictures taken with an **Image quality** (75) setting of **NRW (RAW) + Fine** or **NRW (RAW) + Normal** are deleted with the  button, both the NRW (RAW) and JPEG images that were recorded at the same time are deleted.
To delete only NRW (RAW) images or JPEG images, select **Erase selected NRW images** or **Erase selected JPEG images** in **Delete** of the playback menu (93).
- When images are taken with continuous shooting, each series of images is treated as a group (pictures in a sequence) and only the group's "key picture" is displayed in the default setting. When you press the  button during key picture playback, all images in the key picture's sequence can be deleted.
To delete each picture in a sequence, before pressing the  button, press the  button to display each image in the sequence individually.

Deleting the Last Image Captured While in Shooting Mode

When using shooting mode, press the  button to delete the last image that was saved.

Deleting Multiple Images

To delete multiple images, select **Delete** from the playback menu (93).

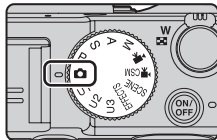
Shooting Features

(Auto) Mode

Shoot easily with basic camera operations without going into detailed settings.

The camera selects the focus area for autofocus in accordance with the composition or subject.

- The camera automatically selects the areas containing the subject closest to the camera out of 9 focus areas. When the subject is in focus, the focus areas that are in focus (up to 9 areas) light in green.
- See “Focus and Exposure” ( 31) for more information.

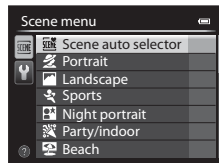
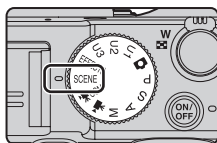


Changing (Auto) Mode Settings

- Features That Can Be Set Using the Multi Selector →  55
- Exposure Compensation →  66
- Changing the Image Quality and Image Size →  75
- Features That Can Be Set Using the **MENU** (Menu) Button
 - Setup menu →  110

Scene Mode (Shooting Suited to Scenes)

Press the **MENU** button and display the scene menu to select one of the following scenes. Pictures are captured using settings that are optimized for the selected scene.



Scene auto selector (default setting) (📖36)	Night landscape (📖38)
Portrait (📖36)	Close-up (📖38)
Landscape (📖37)	Food (📖39)
Sports (📖37)	Museum (📖39)
Night portrait (📖37)	Fireworks show (📖39)
Party/indoor (📖37)	Black and white copy (📖39)
Beach (📖37)	Backlighting (📖40)
Snow (📖37)	Panorama (📖41)
Sunset (📖37)	Pet portrait (📖42)
Dusk/dawn (📖38)	3D 3D photography (📖43)

Viewing a Description (Help Information) of Each Scene

Select the desired scene from the scene menu and rotate the zoom control (📖2) toward **T** (🔍) to view a description of that scene. To return to the original screen, rotate the zoom control toward **T** (🔍) again.

More Information

See "Basic Menu Operations" (📖10) for more information.

Changing Scene Mode Settings

- Features That Can Be Set Using the Multi Selector → 📖55
- Exposure Compensation → 📖66
- Changing the Image Quality and Image Size → 📖75
- Features That Can Be Set Using the **MENU** (Menu) Button
 - Setup menu → 📖110

Characteristics of Each Scene

- Use of a tripod is recommended in scene modes with  indicated due to slow shutter speed.
- Set **Vibration reduction** in the setup menu (110) to **Off** when using a tripod to stabilize the camera.
- For scene modes that use the flash, lower the   (flash pop-up) control to raise the flash (56).

Scene auto selector

When you frame a picture, the camera automatically selects the optimum scene for simpler shooting.

- When the camera automatically selects a scene mode, the shooting mode icon changes to that for the scene mode currently enabled.

Portrait	 : The camera performs the optimal operation for shooting a close-up picture of one to two persons.
	 : The camera performs the optimal operation for shooting a picture of three or more persons or shooting a composition with a large background area.
Landscape	 : The camera performs the optimal operation for shooting a landscape picture.
Night portrait	 : The camera performs the optimal operation for shooting a close-up picture of one to two persons.
	 : The camera performs the optimal operation for shooting a picture of three or more persons or shooting a composition with a large background area.
Night landscape	 : The camera shoots images continuously and combines and saves them as one image, just as when Hand-held in Night landscape ( 38) is selected.
Close-up	 : The camera performs the optimal operation for shooting a close-up picture.
Backlighting	 : The camera performs the optimal operation for shooting non-human subjects.
	 : The camera performs the operation using face detection that is optimal for shooting human subjects.
Other scenes	

- The camera automatically selects the focus area for autofocus in accordance with the composition. The camera detects and focuses on faces (85).
- The digital zoom is not available.

Note on Selecting a Scene Mode Using Scene Auto Selector

Depending upon shooting conditions, the camera may not select the desired scene mode. Should this occur, switch to  (auto) mode (26) or select the optimum scene mode for the subject manually.

Portrait

- The camera detects and focuses on a face (85).
- The skin softening feature makes the subject's skin appear softer (44).
- If no faces are detected, the camera focuses on the subject at the center of the frame.
- The digital zoom is not available.

 Landscape

- When the shutter-release button is pressed halfway, the camera adjusts the focus to infinity. The focus area or focus indicator (📖12) always lights in green.

 Sports

- The camera focuses at the center area of the frame.
- When you continue to hold the shutter-release button all the way down, up to about 6 pictures are shot at a rate of about 8 frames per second (fps) (when image quality is set to **Normal** and image size is set to 📖4000×3000).
- The camera focuses the subject even when the shutter-release button is not pressed halfway. You may hear the sound of the camera focusing.
- Focus, exposure, and hue are fixed at the values determined with the first image in each series.
- The frame rate with continuous shooting may become slow depending upon the current image quality setting, image size setting, the memory card used, or shooting condition.

 Night portrait

- The flash always fires. Raise the flash before shooting.
- The camera detects and focuses on a face (📖85).
- The skin softening feature makes the skin tones in people's faces appear softer (📖44).
- If no faces are detected, the camera focuses on the subject at the center of the frame.
- The digital zoom is not available.

 Party/indoor

- The camera focuses at the center area of the frame.
- As images are easily affected by camera shake, hold the camera steadily. Set **Vibration reduction** to **Off** in the setup menu (📖110) when shooting using a tripod to stabilize the camera.

 Beach

- The camera focuses at the center area of the frame.

 Snow

- The camera focuses at the center area of the frame.

 Sunset

- When the shutter-release button is pressed halfway, the camera adjusts the focus to infinity. The focus area or focus indicator (📖12) always lights in green.

Dusk/dawn



- When the shutter-release button is pressed halfway, the camera adjusts the focus to infinity. The focus area or focus indicator (📖12) always lights in green.

Night landscape

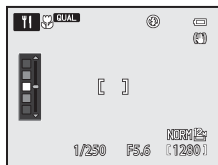
- From the screen displayed after  **Night landscape** is selected, select  **Hand-held** or  **Tripod**.
-  **Hand-held** (default setting): This enables you to shoot with the minimum of camera shake and noise even when holding the camera by hand.
 - When the shutter-release button is pressed all the way, pictures are shot continuously, and the camera combines these pictures to save a single picture.
 - Once the shutter-release button is pressed all the way, hold the camera steady without moving it until a still picture is displayed. After taking a picture, do not turn the camera off before the monitor switches to the shooting screen.
 - The angle of view (image area) seen in the saved image will be narrower than that seen on the monitor at the time of shooting.
-  **Tripod**: Select this mode when the camera is stabilized, such as with a tripod.
 - Vibration reduction is not used even if **Vibration reduction** (📖111) in the setup menu is set to **On**.
 - Press the shutter-release button all the way to shoot a single picture at slow shutter speeds.
- When the shutter-release button is pressed halfway, the camera adjusts the focus to infinity. The focus area or focus indicator (📖12) always lights in green.

Close-up

- The focus mode (📖62) setting is changed to  (close range only) and the zoom is automatically set at a position where the camera can shoot from the closest possible range.
- You can move the focus area that the camera focuses on. Press the  button and then rotate the multi selector or press , , , or  to move the focus area. To adjust the following settings, press the  button to temporarily cancel focus area selection, and then adjust each setting.
 - Flash mode or self-timer
- The camera focuses on the subject even when the shutter-release button is not pressed halfway. You may hear the sound of the camera focusing.

Food

- The focus mode (📖62) setting is changed to 🍷 (macro close-up) and the zoom is automatically set at a position where the camera can shoot from the closest possible range.
- You can adjust the hue by pressing the multi selector ▲ or ▼. The hue adjustment setting is saved in the camera's memory even after the camera is turned off.
- You can move the focus area that the camera focuses on. Press the OK button and then rotate the multi selector or press ▲, ▼, ◀, or ▶ to move the focus area. To adjust the following settings, press the OK button to temporarily cancel focus area selection, and then adjust each setting.
 - Hue or self-timer
- The camera focuses on the subject even when the shutter-release button is not pressed halfway. You may hear the sound of the camera focusing.



Museum

- The camera focuses at the center area of the frame.
- The camera captures up to ten images while the shutter-release button is pressed all the way, and the sharpest image in the series is automatically selected and saved (BSS (Best Shot Selector) (📖71)).

Fireworks show



- The shutter speed is fixed at 4 seconds.
- The camera focuses at infinity. When the shutter-release button is pressed halfway, the focus indicator (📖12) always lights in green.
- Zoom position from which one position toward a wide-angle position from the maximum optical zoom position cannot be used.

Black and white copy

- The camera focuses at the center area of the frame.
- When shooting nearby object, shoot with 🍷 (macro close-up) in the focus mode (📖62).

Backlighting

- On the screen that appears when  **Backlighting** is selected, HDR (high dynamic range) composition can be set.
- When **HDR** is set to **Off** (default setting): The flash fires to prevent the backlit subject from being hidden in shadow. Shoot pictures with the flash raised.
- When **HDR** is set to **Level 1**-**Level 3**: Use when taking pictures with very bright and dark areas in the same frame. Select **Level 1** when there is less difference between bright and dark areas, and **Level 3** when there is more difference between bright and dark areas.
- The camera focuses at the center area of the frame.

Notes on HDR

- Use of a tripod is recommended. Set **Vibration reduction** in the setup menu ( 110) to **Off** when using a tripod to stabilize the camera.
- The angle of view (i.e., the area visible in the frame) seen in the saved image will be narrower than that seen on the monitor at the time of shooting.
- When the shutter-released button is pressed all the way, the camera shoots pictures continuously and saves the following two images.
 - Non-HDR composite image
 - HDR composite image (loss of detail is reduced in highlights and shadows)
 - If there is only enough memory to save one image, one image processed by D-Lighting ( 93) at the time of shooting, in which dark areas of the image are corrected, is the only image saved.
- Once the shutter-release button is pressed all the way, hold the camera steady without moving it until a still picture is displayed. After taking a picture, do not turn the camera off before the monitor switches to the shooting screen.
- Depending on the shooting conditions, dark shadows may appear around bright subjects and bright areas may appear around dark subjects. You can compensate by lowering the level setting.

Panorama

- On the screen that is displayed when  **Panorama** is selected, select  **Easy panorama** or  **Panorama assist**.
- Easy panorama** (default setting): You can take a panorama picture simply by moving the camera in the desired direction.
 - Shooting range can be selected from **Normal (180°)** (default setting) or **Wide (360°)**.
 - Press the shutter-release button all the way down, remove your finger from the button, and then slowly pan the camera horizontally. Shooting automatically ends when the camera captures the specified shooting range.
 - When shooting starts, the camera focuses on the subject at the center area of the frame.
 - The zoom is fixed at the wide-angle position.
 - When the  button is pressed while the picture recorded with Easy panorama is displayed in full-frame playback mode, the camera scrolls the displayed area automatically.

See “Taking Pictures with Easy Panorama” (p. 3).

- Panorama assist**: Use this mode when shooting a series of pictures that can later be joined on a computer to form a single panorama.
 - Press the multi selector , ,  or  to select the direction in which pictures are to be joined and press the  button.
 - After shooting the first picture, shoot the necessary number of pictures while confirming the seams. To finish shooting, press the  button.
 - Transfer taken pictures to a computer and use the **Panorama Maker** software (p. 98) to join them in a single panorama.
- See “Using Panorama Assist” (p. 6) for more information.

Note on Printing Panorama Pictures

When printing panorama pictures, a full view may not be printed depending on the printer settings. Additionally, printing may not be available depending on the printer.

For more information, see your printer's manual or contact a digital photo lab.

Pet portrait

- When the camera is pointed at a dog or cat, it detects and focuses on its face. In the default setting, the shutter is automatically released when the camera has focused on the pet (pet portrait auto release).

- On the screen that appears when  **Pet portrait** is selected, select **Single** or **Continuous**.

- **Single:** One picture is captured at a time

- **Continuous:**

The camera automatically captures 3 pictures continuously at a rate of about 3 frames per second when it has focused on the detected face.

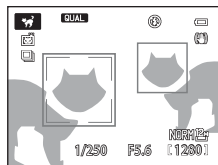
When the shutter is released manually, up to about 6 pictures are shot at a rate of about 8 frames per second while you hold the shutter-release button all the way down (when image quality is set to **Normal** and image size is set to  **4000×3000**).

Pet Portrait Auto Release

- To change **Pet portrait auto release** settings, press the multi selector .
 - : When the camera detects a pet's face, it focuses and then releases the shutter automatically.
 - OFF:** The camera does not release the shutter automatically, even if a pet's face is detected. Press the shutter-release button to release the shutter. The camera also detects human faces (85). When both human and pet's faces are detected, the camera focuses on the pet's face.
 - In the following situations, **Pet portrait auto release** is automatically switched to **OFF**.
 - When a continuous shooting series with pet portrait auto release is repeated 5 times
 - When remaining capacity of the internal memory or memory card is low
- To continue shooting with **Pet portrait auto release**, press the multi selector  to set again.

Focus Area

- The detected face is framed by a yellow double border (focus area). When the camera has focused on the face, the double border turns green.
- When the camera detects more than one face of dog or cat (up to 5), the largest face displayed on the monitor is framed by a double border (focus area) and the others by single borders.
- If no human or pet's faces are detected, the camera focuses on the subject at the center of the frame.



Notes on Pet Portrait

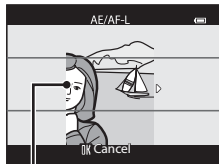
- The digital zoom is not available.
- Under some shooting conditions, such as subject-to-camera distance, speed of moving pets, direction in which the pets are facing, and brightness of the faces, the camera may be unable to detect a face, or may display a border around something other than a dog or cat.

Viewing Pictures Taken Using Pet Detection

When zooming in on an image displayed in full-frame playback mode by rotating the zoom control toward **T** () , the image is enlarged at the center of a pet's face detected during shooting (91) (except for pictures taken with continuous shooting).

3D 3D photography

- The camera takes one picture for each eye to simulate a three-dimensional image on a 3D-compatible TV or monitor.
- After pressing the shutter-release button to shoot the first frame, move the camera horizontally to the right until the guide on the screen overlaps the subject. The camera automatically captures the second image when it detects that the subject is aligned with the guide.
- The camera focuses on the center of the first frame shot.
- The focus, exposure, and white balance are fixed when the first frame is shot, and **AE/AF-L** is displayed on the screen.
- The angle of view (the area visible in the frame) that can be stored is narrower than that which appears on the shooting screen.
- Pictures taken in this mode are saved with **Normal** as the image quality and **1920×1080** as the image size.
- The two captured images are saved as a 3D image (MPO file). The first image (the left eye image) is also saved as a JPEG file.



Guide

✓ Notes on 3D Photography

- Moving subjects are not suited to 3D photography.
- Pictures have a less pronounced 3D feel as the distance between the camera and background is increased.
- Pictures may have a less pronounced 3D feel when the subject is dark or when the second picture is not aligned precisely.
- Pictures taken under dim lighting may appear grainy with noise.
- The telephoto zoom position is restricted to an angle of view equivalent to that of about 135 mm lens in 35mm [135] format.
- The operation is canceled when the **OK** button is pressed after shooting the first frame or the camera cannot detect that the guide is on the subject within 10 seconds.
- If the camera does not take the second picture and cancels the shooting even when you align the guide with the subject, try shooting with the shutter-release button.

Viewing 3D Photography

- 3D images cannot be played back in 3D on the camera monitor screen. Only the left eye image is displayed during playback.
- To view 3D images in 3D, a 3D-compatible TV or monitor is required. 3D images can be played back in 3D by connecting the camera to a 3D-compatible TV or monitor using a 3D-compatible HDMI cable (📖96).
- When connecting the camera using an HDMI cable, set the following for the **TV settings** in the setup menu (📖110).
 - **HDMI: Auto** (default setting) or **1080i**
 - **HDMI 3D output: On** (default setting)
- When the camera is connected using an HDMI cable for playback, it may take a while to switch the display between 3D images and non-3D images. The images played back in 3D cannot be enlarged.
- See the documentation included with your TV or monitor to perform settings of the TV or monitor.

Note on Viewing 3D Images

When viewing 3D images on a 3D-compatible TV or monitor for an extended period of time, you may experience discomfort such as eye strain or nausea. Carefully read the documentation included with your TV or monitor to ensure proper use.

Using Skin Softening

In the following shooting modes, the camera detects up to 3 human faces when the shutter is released, and processes the image to make facial skin tones softer before saving the image.

- **Scene auto selector** (📖36), **Portrait** (📖36) or **Night portrait** (📖37) in scene mode

Skin softening can also be applied to saved images (📖93).

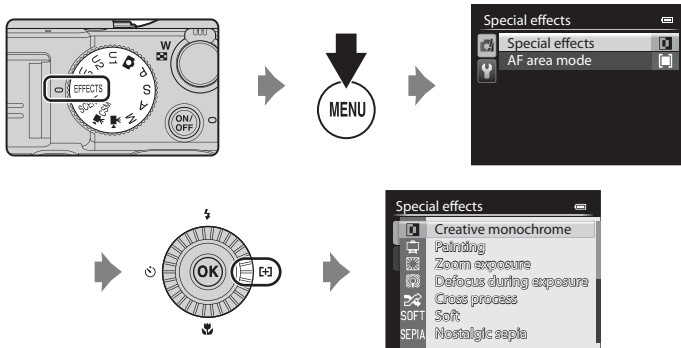
Notes on Skin Softening

- It may take more time to save images.
- Under some shooting conditions, the desired skin softening results may not be achieved, and skin softening may be applied to areas of the image where there are no faces.

Special Effects Mode (Applying Effects When Shooting)

The effect can be applied to pictures during shooting. One of the 10 special effects is selected to shoot.

To select an effect, press the **MENU** button to display the special effects menu.



- The focus area for autofocus differs depending on the setting of **AF area mode** that can be selected in the  tab after pressing the **MENU** button.
- When **AF area mode** is set to **Auto** (default setting), the camera has 9 focus areas, and automatically selects the focus areas containing the subject closest to the camera. When the subject is in focus, the focus area (active focus area) lights in green (maximum of 9 areas).



More Information

See "Basic Menu Operations" ( 10) for more information.

Special Effects Mode (Applying Effects When Shooting)

Option	Description
Creative monochrome (default setting)	Create monochrome photographs by adjusting the grainy feel and contrast. Monochrome photographs with the dark and light tones reversed can also be created (solarization). • Rotate the main command dial to adjust grainy feel. • Rotate the sub-command dial to adjust contrast.
Painting	Create images with the ambience of paintings.
Zoom exposure*	When the shooting mode icon lights in green, create dynamic pictures radiated out from the center by zooming from W (wide-angle position) to T (telephoto zoom position) after the shutter is open and until it is closed. • The zoom is fixed at W (wide-angle) end. • The shutter speed is fixed at 2 seconds. • Rotate the main command dial to switch zooming magnifications (2× or 3× (default setting)). • The desired shooting effect is not produced when the subject is bright and the shutter speed cannot be slowed.
Defocus during exposure*	When the shooting mode icon lights in green, create pictures by varying focus slightly until the shutter closes. • The desired shooting effect is not produced when the subject is bright and the shutter speed cannot be slowed.
Cross process	Create images with an unusual hue by converting a positive color image into negative or negative color image into positive. • Rotate the main command dial to select hue.
Soft	Soften the image by adding a slight blur to the overall image.
Nostalgic sepia	Add a sepia tone and reduces the contrast to simulate the qualities of an old photograph.
High key	Give the overall image a bright tone.
Low key	Give the overall image a dark tone.

Option	Description
Selective color	Create a black and white image in which only the specified color remains. • Rotate the main command dial to select the color to be retained from the slider. • Press the OK button to hide the slider and cancel color selection. To display the slider again, press the OK button again. Slider

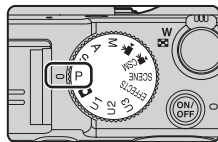
* Use of a tripod is recommended during **Zoom exposure** or **Defocus during exposure**. **Vibration reduction** will not function even if **Vibration reduction** in the setup menu is set to **On**.

Changing Special Effects Mode Settings

- Features That Can Be Set Using the Multi Selector → 55
- Exposure Compensation → 66
- Changing the Image Quality and Image Size → 75
- Features That Can Be Set Using the **MENU** (Menu) Button
 - AF area mode → 71
 - Setup menu → 110

P, S, A, M Modes (Setting the Exposure for Shooting)

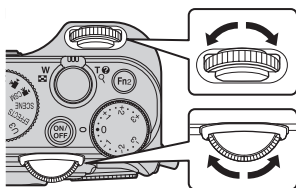
Pictures can be shot with greater control by setting the quick menu (📖67) or shooting menu (📖70) items in addition to setting the shutter speed or aperture value manually according to shooting conditions and requirements.



- The focus area for autofocus differs depending on the setting of **AF area mode** that can be selected in the **P, S, A** or **M** tab after pressing the **MENU** button.
- When **AF area mode** is set to **Center (normal)** (default setting), the camera will focus at the center area of the frame.

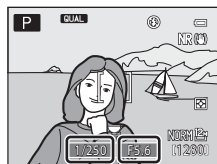
The procedure for shooting pictures at the desired brightness (exposure) by adjusting the shutter speed or aperture value is called “determine exposure”. The sense of dynamism and amount of background defocus in pictures to be shot vary depending on the combinations of shutter speed and aperture value even if the exposure is the same.

Rotate the command dial to set the shutter speed and aperture value.



Sub-command dial

Main command dial



Shutter speed

Aperture value

Exposure mode	Shutter speed (📖82)	Aperture value (📖49)
P Programmed auto (📖50)	Automatically adjusted (flexible program is enabled by the main command dial).	
S Shutter-priority auto (📖50)	Adjusted by the main command dial.	Automatically adjusted.
A Aperture-priority auto (📖50)	Automatically adjusted.	Adjusted by the sub-command dial.
M Manual (📖50)	Adjusted by the main command dial.	Adjusted by the sub-command dial.

Adjusting the Shutter Speed

In **S** mode, the range is from a maximum of 1/4000 to 15 seconds.

In **M** mode, the range is from a maximum of 1/4000 to 60 seconds.

See “The Control Range of the Shutter Speed” (📖82) for more information.



Faster 1/1000 s



Slower 1/30 s

Adjusting the Aperture Value

In **A** and **M** modes, the range is from f/2 to 8 (wide-angle position) and from f/4 to 8 (telephoto zoom position).



Larger aperture (Small f-number)
f/2



Smaller aperture (Large f-number)
f/8

Aperture Value (F-number) and Zoom

Large apertures (expressed by small f-numbers) let more light into the camera, and small apertures (large f-numbers) let less light.

The aperture value of the zoom lens of this camera changes depending on the zoom position. When zooming to the wide-angle position and telephoto zoom position, the aperture values are f/2 and f/4, respectively.

- When **Fixed aperture** (📖111) is set to **On**, zooming can be performed with minimum changes in the aperture value.

Built-in ND Filter

When the subject is too bright, set **Built-in ND filter** in the shooting menu (📖70) to reduce the light and shoot.

U1, U2 or U3 (User settings) Mode

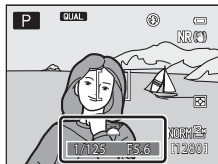
Even when the mode dial is set to **U1**, **U2** or **U3** (User settings) mode, you can shoot in **P** (Programmed auto), **S** (Shutter-priority auto), **A** (Aperture-priority auto) or **M** (Manual). The setting combinations (User settings) that are frequently used for shooting can be saved in **U1**, **U2** and **U3** (📖52).

P, S, A, M Modes (Setting the Exposure for Shooting)

P (Programmed auto)

Use for automatic control of the exposure by the camera.

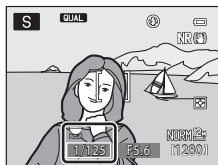
- Different combinations of shutter speed and aperture value can be selected without changing the exposure by rotating the main command dial ("flexible program"). While flexible program is in effect, a flexible program mark (**X**) is displayed next to the mode indicator (**P**) in the upper left of the monitor screen.
- To cancel flexible program, rotate the main command dial until the flexible program mark (**X**) is no longer displayed, or press the **AE-L/AF-L** button while pressing the **Fn1** button. Selecting another shooting mode, or turning off the camera, also cancels flexible program.



S (Shutter-priority auto)

Use to shoot fast moving subjects with a fast shutter speed, or use to emphasize the movements of a moving subject with a slow shutter speed.

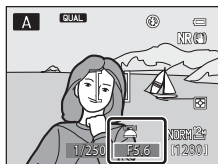
- The shutter speed can be adjusted by rotating the main command dial.



A (Aperture-priority auto)

Use to bring subjects including both the foreground and background into focus or blur the subject's background intentionally.

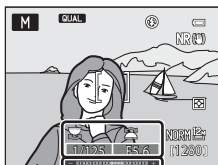
- The aperture value can be adjusted by rotating the sub-command dial.



M (Manual)

Use to control the exposure according to shooting requirements.

- When adjusting the aperture value or shutter speed, the degree of deviation from the exposure value measured by the camera is displayed in the exposure indicator of the monitor screen. The degree of deviation in the exposure indicator is displayed in EVs (-3 to +3 EV in increments of 1/3 EV).
- The shutter speed can be adjusted by rotating the main command dial and the aperture value can be adjusted by rotating the sub-command dial.



Exposure indicator

 Notes on Shooting

- When zooming is performed after the exposure is set, exposure combinations or aperture value may be changed.
- When the subject is too dark or too bright, it may not be possible to obtain the appropriate exposure. In such cases, the shutter speed indicator or aperture value indicator flashes when the shutter-release button is pressed halfway (except when the **M** mode is used). Change the shutter speed setting or aperture value. When settings such as **Built-in ND filter** (📖72) or **ISO sensitivity** (📖68) are changed, the appropriate exposure may be obtained.

 Note on ISO Sensitivity

When **ISO sensitivity** (📖68) is set to **Auto** (default setting), **ISO 80-200**, **ISO 80-400** or **ISO 80-800**, the ISO sensitivity in **M** mode is fixed at ISO 80.

 Control Range of the Shutter Speed

The control range differs depending on the aperture value, ISO sensitivity or continuous shooting setting. See "The Control Range of the Shutter Speed" (📖82) for more information.

 More Information

See "Customize command dials" (📖112) for more information.

Changing P, S, A, M Modes

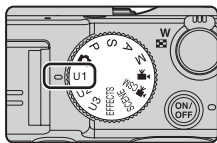
- Features That Can Be Set Using the Multi Selector → 📖55
- Exposure Compensation → 📖66
- Features That Can Be Set Using the Quick Menu Dial → 📖67
- Features That Can Be Set Using the **MENU** (Menu) Button
 - Shooting menu → 📖71
 - Setup menu → 📖110

U1, U2 and U3 (User Settings Modes)

Up to three setting combinations that are frequently used for shooting (User settings) can be saved in **U1**, **U2** and **U3**. Shooting is possible in **P** (Programmed auto), **S** (Shutter-priority auto), **A** (Aperture-priority auto) or **M** (Manual).

Rotate the mode dial to **U1**, **U2** or **U3** to retrieve the settings saved in **Save user settings**.

- Frame the subject and shoot with these settings, or change the settings as required.
- The setting combinations that are retrieved when the mode dial is rotated to **U1**, **U2** or **U3** can be changed as many times as you want in **Save user settings**.



Saving Settings in U1, U2 or U3 Mode (Save User Settings)

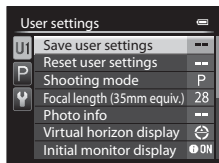
The frequently used settings for shooting can be changed and saved in **U1**, **U2** and **U3**.

1 Rotate the mode dial to **U1**, **U2** or **U3**.

2 Change to a frequently used combination of shooting settings.

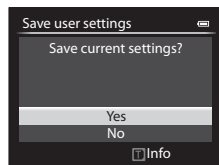
- Set the flash mode (📖56) or focus mode (📖62).
- Display the quick menu by rotating the quick menu dial (📖67).
- Press the **MENU** button to display the menu and switch between tabs with the multi selector (📖11).
 - **U1, U2, U3** tabs: Display the specialized menus for **U1**, **U2** and **U3** (📖73).
 - **P, S, A, M** tabs: Display the shooting menus (📖71).

3 After changing the settings, choose **Save user settings** in the specialized menu for **U1**, **U2** or **U3**, and press the **OK** button.



4 Choose **Yes** and press the **OK** button.

- The current settings are saved.
- Rotate the zoom control toward **T** (Q) to display the settings. Rotate toward **T** (Q) again to return to the Save user settings screen.



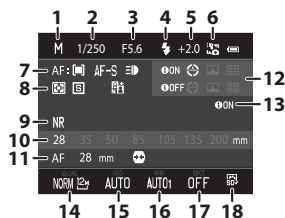
✓ Clock Battery

If the internal clock battery (🔋25) is exhausted, the settings saved in **U1**, **U2** or **U3** will be reset. Writing down any important setting is recommended.

🔍 Confirmation Screen of User Settings

Rotate the zoom control toward **T** (Q) in step 4 of **Save user settings** to display the settings on the screen.

- 1 Shooting mode
- 2 Shutter speed (**S** or **M** mode)
- 3 Aperture value (**A** or **M** mode)
- 4 Flash mode
- 5 Flash exp. comp.
- 6 Flash control
- 7 AF area mode, Autofocus mode, AF assist
- 8 Metering, continuous shooting mode, Active D-Lighting
- 9 Noise reduction filter
- 10 Zoom memory
- 11 Focus mode, Focal length (35mm equiv.), Distortion control
- 12 Photo info, Virtual horizon display
- 13 Initial monitor display
- 14 Image quality, Image size
- 15 ISO sensitivity
- 16 White balance
- 17 Auto bracketing
- 18 Picture Control



Changing U1, U2 or U3 Mode Settings

- Features That Can Be Set Using the Multi Selector → 55
- Exposure Compensation → 66
- Features That Can Be Set Using the Quick Menu Dial → 67
- Features That Can Be Set Using the **MENU** (Menu) Button
 - Shooting menu → 71
 - Specialized menu for **U1, U2** or **U3** → 73
 - Setup menu → 110

Resetting for U1, U2 and U3

If **Reset user settings** is selected in specialized menu for **U1, U2** or **U3**, the settings that are saved in the user settings are reset as follows:

- Specialized menus for **U1, U2** and **U3**: **Shooting mode**: **P** Programmed auto, **Focal length (35mm equiv.)**: **28 mm**, **Photo info**: information hidden, **Virtual horizon display**: **Circle**, **Initial monitor display**: **Show info**, **Flash mode**: **Auto**, **Focus**: **AF** Autofocus, **Self-timer**: **Off**, **AF assist**: **Auto**
- Shooting menu, quick menu: Same as the default setting for each item.

Features That Can Be Set Using the Multi Selector

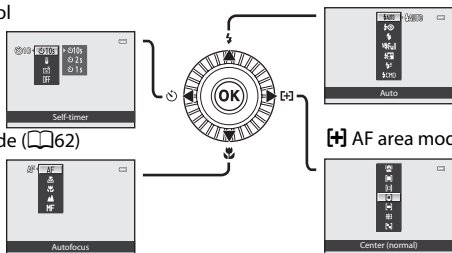
Press the multi selector **▲** (⚡), **◀** (😊), **▼** (👤), or **▶** (⊞) while shooting to operate the following functions.

🕒 Self-timer (📖59)/
Smile timer (📖60)/
Remote control

👤 Focus mode (📖62)

⚡ Flash mode (📖56)

⊞ AF area mode



Available Functions

Available functions differ according to the shooting mode as follows.

- See “List of the Default Settings” (📖64) for more information on the default settings in each shooting mode.

Function	📷	SCENE	EFFECTS	P, S, A, M, U1, U2, U3	🎤, CSM
⚡ Flash mode (📖56)	✓	3	3	✓	—
🕒 Self-timer (📖59)	✓			✓	✓
😊 Smile timer (📖60)	✓			✓	—
Remote control ¹	✓			✓	✓
👤 Focus mode (📖62)	✓			✓	✓
⊞ AF area mode ²	—	—		✓	—

¹ Use the Remote Control ML-L3 (available separately) to release the shutter (📖104).

² Set the method of how to change the focus area for autofocus (📖71). Set **Multi selector right press** to **Off** in the setup menu (📖110) if you do not want to display the selected focus area when the multi sector **▶** is pressed.

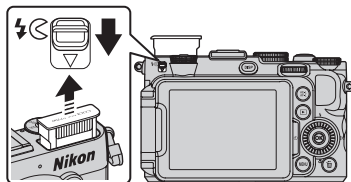
³ The setting varies with scene mode or special effects. See “List of the Default Settings” (📖64) for more information.

Using the Flash (Flash Modes)

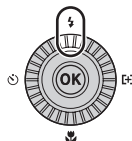
You can shoot pictures with a flash by raising the built-in flash. You can set a flash mode that suits the shooting conditions.

1 Lower the (flash pop-up) control to raise the flash.

- When the flash is lowered, the flash mode is fixed at  (off).

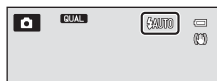
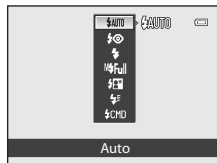


2 Press (flash mode) on the multi selector.



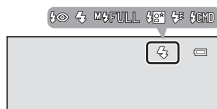
3 Press the multi selector to select the desired mode and press the button.

- See “Available Flash Modes” (p.57) for more information.
- When the manual flash is selected, select the flash output and press the  button.
- If the  button is not pressed within a few seconds, the selection will be canceled.
- When  (auto) is applied,  is only displayed for a few seconds even if monitor indicators (p.9) are turned on.



4 Frame the subject and shoot.

- When you press the shutter-release button halfway, you can check the current flash mode by the icon at the top of the monitor.
 - On: When the shutter-release button is pressed all the way, the flash will fire in accordance with the flash mode set. When  (auto) is set, the flash will fire if  is displayed.
 - Flashing: The flash is charging. The camera cannot take pictures.
 - Off: The flash will not fire when a picture is taken.



Available Flash Modes

	Auto
	Flash fires automatically when lighting is dim.
	Auto with red-eye reduction
	Best choice for portraits. Reduces red-eye effect caused by flash in portraits (📖58).
	Off
	Flash does not fire. Available when an external flash unit (optional) is attached.
	Fill flash
	The flash fires when a picture is taken, regardless of how bright the subject is. Use to “fill-in” (illuminate) shadows and backlit subjects.
	Manual
	Flash is forcibly fired at the flash output that is set for the built-in flash or optional Speedlight SB-400. Choose the flash output from M$\frac{1}{2}$Full (full flash), M$\frac{1}{2}$, M$\frac{1}{4}$, M$\frac{1}{8}$, M$\frac{1}{16}$, M$\frac{1}{32}$, M$\frac{1}{64}$ and M$\frac{1}{128}$ (SB-400 only). For example, when M$\frac{1}{16}$ is chosen, the flash is 1/16 of the full flash.
	Slow sync
	Fill flash is combined with a slow shutter speed. Suitable for portraits of human subjects shot at night or under dim light. Flash illuminates main subject; slow shutter speeds are used to capture background.
	Rear-curtain sync
	Fill flash fires just before the shutter closes, creating the effect of a stream of light behind moving subjects.
	Commander mode
	The camera's built-in flash emits low-level flashes and an off-camera optional flash unit is controlled wirelessly as a remote flash (🔗57). The Speedlight fires according to the Commander mode options set in the shooting menu (📖70). - Not available when an optional flash unit is attached. - Can be used when P, S, A, M, U1, U2 or U3 mode is selected.

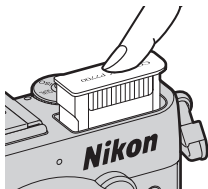
Features That Can Be Set Using the Multi Selector

✓ High Temperature Caution

If you are taking pictures repeatedly with the flash within a short period of time, the flash unit and its surrounding area can become hot. Before lowering the flash, be sure to allow the flash unit and its surrounding area to cool down.

✎ Lowering the Flash

When not using the flash, gently push to lower the flash until it clicks shut.



✎ Effective Range of the Built-in Flash

The built-in flash has a range of about 0.5 to 10 m (1 ft 8 in. to 32 ft) for wide-angle position, and about 0.5 to 5.5 m (1 ft 8 in. to 18 ft) for telephoto zoom position (when **ISO sensitivity** is set to **Auto**).

✎ Flash Mode Setting

- The setting varies with shooting mode. See “Available Functions” (📖55) and “List of the Default Settings” (📖64) for more information.
- Some features cannot be used in combination with other menu settings. See “Features Not Available in Combination” (📖79) for more information.
- The changed flash mode setting applied in the following situations is saved in the camera's memory even after the camera is turned off.
 - When shooting mode **P**, **S**, **A** or **M** is used
 - When  (auto with red-eye reduction) is selected in  (auto) mode

✎ Auto with Red-eye Reduction

This camera uses **advanced red-eye reduction (“In-Camera Red-Eye Fix”)**.

If the camera detects “red-eye” when a picture is taken, Nikon's own In-Camera Red-Eye Fix processes the image before it is recorded.

Note the following when taking pictures:

- The time required to save the picture increases slightly.
- Advanced red-eye reduction may not produce the desired results in some situations.
- In extremely rare instances, areas not subject to red-eye may be affected by advanced red-eye reduction processing. In these cases, choose another mode and try again.

✎ External Flash Unit

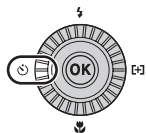
You can attach the Nikon Speedlights to the camera's accessory shoe (📖1) to take pictures. See “Speedlights (External Flash Unit)” (📖87) for more information.

Using the Self-timer

The self-timer is suitable for taking group shots including yourself and reducing the vibration when the shutter-release button is pressed.

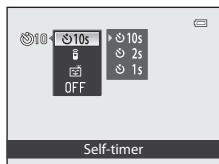
When using the self-timer, use of a tripod is recommended. Set **Vibration reduction** in the setup menu (📖110) to **Off** when using a tripod to stabilize the camera.

- 1 Press ◀ (🕒 self-timer) on the multi selector.



- 2 Use the multi selector to select 🕒10s (or 🕒2s, 🕒1s) and press the OK button.

- To change the time for self-timer, press ▶ before pressing the OK button.
- 🕒10s (10 seconds): suitable for group pictures.
- 🕒2s (2 seconds), 🕒1s (1 second): suitable for preventing camera shake.
- When the shooting mode is set to **Pet portrait** in scene mode, 🐾 (pet portrait auto release) is displayed (📖42). The self-timer is not available.
- The mode selected for the self-timer is displayed.
- If the OK button is not pressed within a few seconds, the selection will be canceled.

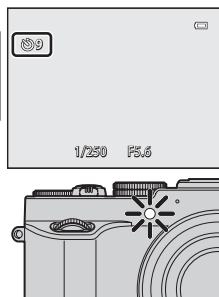


- 3 Frame the picture and press the shutter-release button halfway.

- Set the focus and exposure.

- 4 Press the shutter-release button all the way.

- The self-timer starts, and the number of seconds remaining before the shutter is released is displayed. The self-timer lamp flashes while the timer is counting down. About one second before the shutter is released, the lamp stops flashing and remains lit (except 🕒1s).
- When the shutter is released, the self-timer turns **OFF**.
- To stop the timer before a picture is taken, press the shutter-release button again.



More Information

See "Self-timer: after release" (📖110) for more information.

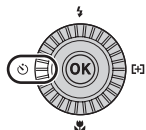
Shooting Smiling Faces Automatically (Smile Timer)

When this mode is selected, the camera detects smiling faces and automatically releases the shutter even if you do not press the shutter-release button.

- This function can be used when the shooting mode is (auto), **P**, **S**, **A**, **M**, **U1**, **U2**, **U3**, scene mode **Portrait** or **Night portrait**.

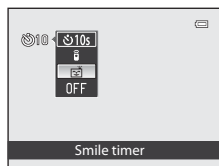
1 Press (self-timer) on the multi selector.

- Change any flash mode, exposure, or shooting menu settings before pressing the button.



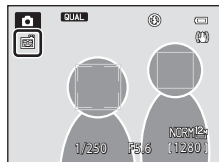
2 Use the multi selector to choose (Smile timer), and press the button.

- If the button is not pressed within a few seconds, the selection will be canceled.



3 Frame the picture and wait for the subject to smile without pressing the shutter-release button.

- When the camera detects a face, a yellow double border (focus area) is displayed around that face. When the camera focuses on that face, the double border will turn green for a moment and focus is locked.
- Up to 3 faces are detected. When more than one face is detected, the face closest to the center of the frame is framed by a double border and the others by single borders.
- If the camera detects that the face framed by the double border is smiling, the shutter is automatically released.
- Each time the shutter is released, automatic shooting using face detection and smile detection is repeated.



4 Finish shooting.

- To cancel smile detection and finish shooting, return to step 1 and select **OFF**.



Notes on Smile Timer

- The digital zoom is not available.
- Under some shooting conditions, faces and smiling faces may not be detected properly.
- See "Using Face Detection" (📖85) for more information.
- The smile timer cannot be used simultaneously with certain shooting modes. See "Available Functions" (📖55) and "List of the Default Settings" (📖64) for more information.
- Some features cannot be used in combination with other menu settings. See "Features Not Available in Combination" (📖79) for more information.



When the Self-timer Lamp Flashes

When the camera detects a face, the self-timer lamp flashes. The lamp quickly flashes immediately after the shutter is released.



Releasing the Shutter Manually

The shutter can also be released by pressing the shutter-release button. If no faces are detected, the camera focuses on the subject at the center area of the frame.



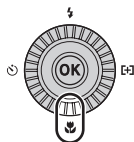
More Information

See "Autofocus" (📖86) for more information.

Using Focus Mode

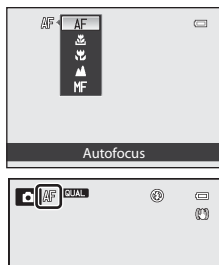
Choose a focus mode according to the desired scene.

- 1 Press **▼** (🔍 focus mode) on the multi selector.



- 2 Use the multi selector to choose the desired focus mode and press the **OK** button.

- See “Available Focus Modes” (📖63) for more information.
- If the **OK** button is not pressed within a few seconds, the selection will be canceled.
- When **AF** (autofocus) is applied, **AF** is only displayed for a few seconds even if monitor indicators (📖9) are turned on.



Available Focus Modes

AF Autofocus

The camera automatically adjusts the focus according to the distance to the subject. Use when the distance from the subject to the lens is 50 cm (1 ft 8 in.) or more, or 80 cm (2 ft 8 in.) or more at the maximum telephoto zoom position.

Close range only/ Macro close-up

Use for close-ups of flowers or small objects.

How close you can be to the subject while shooting depends on the zoom position. When the zoom ratio is set to a position where / and the zoom indicator light in green, the camera can focus on subjects at approx. 10 cm (4 in.) or farther from the lens. At the maximum wide-angle zoom position (zoom position ), the camera can focus on subjects at approx. 2 cm (0.8 in.) or farther from the lens.

- When using the maximum telephoto zoom position, the camera can focus on subjects at approx. 45 cm (1 ft 6 in.) or farther from the lens.
- When using  (close range only), the camera focuses on subjects in close range. The camera may not be able to focus on subjects at far distances.

Infinity

Use when shooting distant scenes through window glass or when shooting landscapes. The camera automatically adjusts the focus near infinity.

- The camera may not be able to focus on nearby objects.
- The flash mode is set to  (off).

MF Manual focus

The focus can be adjusted for any subject that is a distance of 2 cm (0.8 in.) to infinity from the lens (2). The closest distance at which the camera can focus varies depending on the zoom position.

- This function can be used when the shooting mode is **P**, **S**, **A**, **M**, **U1**, **U2**, **U3**, special effects mode, **Sports** scene mode, movie mode or movie custom setting mode.

Note on Shooting with the Flash

The flash may be unable to light the entire subject at distances of less than 50 cm (1 ft 8 in.).

Focus Mode Setting

- The setting varies with the shooting mode. See “Available Functions” (55) and “List of the Default Settings” (64) for more information.
- Some features cannot be used in combination with other menu settings. See “Features Not Available in Combination” (79) for more information.
- For shooting modes **P**, **S**, **A** and **M**, the changed focus mode setting is saved in the camera’s memory even after the camera is turned off.

Macro Close-up

In shooting modes such as scene modes that cannot use the **Autofocus mode** (71), **Full-time AF** may be turned on and the camera will adjust focus even if the shutter-release button is not pressed halfway when  (close range only) or  (macro close-up) is set. You may hear a sound of the camera focusing.

List of the Default Settings

The default settings in each shooting mode are described below.

- Similar information about scene mode can be found on the next page.

Shooting mode	Flash mode ¹ (56)	Self-timer (59)	Focus mode (62)	AF area mode (71)
(auto) (34)	AUTO	OFF ²	AF ³	–
EFFECTS (special effects) (45)	⁴	OFF	AF	⁵
P, S, A, M(48)	AUTO	OFF ²	AF	
U1, U2, U3 (User settings) (52)	AUTO	OFF ²	AF	
(movie), CSM (movie custom setting) (101)	⁶	OFF	AF	–

¹ When the flash is lowered, the flash mode is fixed at (off).

² Smile timer can also be selected.

³ **MF** (manual focus) cannot be selected.

⁴ The flash is fixed at (off) when **Zoom exposure** or **Defocus during exposure** is selected.

⁵ (subject tracking) and (target finding AF) are not available.

The AF area mode is fixed at **Center (normal)**, when **Zoom exposure** is selected.

⁶ The setting cannot be changed.

- The setting applied in shooting modes **P**, **S**, **A** and **M** is saved in the camera's memory even after the camera is turned off (except for self-timer).

Features Not Available in Combination

Some features cannot be used in combination with other menu settings (79).

Default settings in scene mode are described below.

	Flash mode ¹ (56)	Self-timer (59)	Focus mode (62)	AF area mode (71)
(36)	AUTO ²	OFF	AF ³	—
(36)		OFF ⁴	AF ³	—
(37)	³	OFF	³	—
(37)	³	OFF ⁵	AF ⁶	—
(37)	⁷	OFF ⁴	AF ³	—
(37)	⁸	OFF	AF ³	—
(37)	AUTO	OFF	AF ⁹	—
(37)	AUTO	OFF	AF ⁹	—
(37)	³	OFF	³	—
(38)	³	OFF	³	—
(38)	³	OFF	³	—
(38)	³	OFF	³	—
(39)	³	OFF	³	—
(39)	³	OFF ¹⁰	AF ⁹	—
(39)	³	OFF	³	—
(39)	³	OFF	AF ⁹	—
(40)	¹¹	OFF	AF ³	—
(41)	¹²	OFF	AF ⁹	—
(42)	³	¹³	AF ⁹	—
3D (43)	³	OFF ³	AF ⁹	—

¹ When the flash is lowered, the flash mode is fixed at (off).

² The camera automatically selects the flash mode appropriate for the scene it has selected.

The setting cannot be changed when using the built-in flash.

³ The setting cannot be changed.

⁴ Smile timer can also be selected.

⁵ When the shutter is released using self-timer or remote control, continuous shooting cannot be performed.

⁶ AF (autofocus) or MF (manual focus) can be selected.

⁷ The setting cannot be changed. The flash mode setting is fixed at fill flash with slow sync and red-eye reduction.

⁸ May switch to slow sync with red-eye reduction flash mode.

⁹ AF (autofocus) or (macro close-up) can be selected.

¹⁰ When the shutter is released using self-timer or remote control, BSS (Best Shot Selector) is disabled.

¹¹ When **HDR** is set to **Off**, the flash mode is fixed at (fill flash). When **HDR** is set to other than **Off**, the flash mode is fixed at (off).

¹² The setting cannot be changed when using **Easy panorama**.

¹³ Pet portrait auto release (42) can be set to on or off. Self-timer and remote control cannot be used.

Features That Can Be Set Using the Exposure Compensation Dial

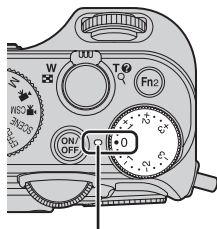
Adjusting Brightness (Exposure Compensation)

When the exposure compensation is set for shooting, the brightness of the overall image can be adjusted to make it brighter or darker.

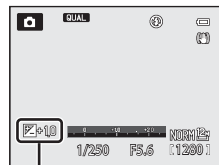
Select the compensation value by rotating the exposure compensation dial.

Setting	Explanation
"+" side	Make the subject brighter than the exposure set by the camera.
"-" side	Make the subject darker than the exposure set by the camera.
"0"	Cancel the exposure compensation.

- When set to a value other than "0", the  mark and compensation value are displayed on the monitor screen and the exposure compensation dial mark turns on when shooting.



Exposure compensation dial mark



Exposure compensation value

Exposure Compensation Value

- If the exposure compensation value is set to a value other than 0.0 when the shooting mode is **M** (manual) mode, the exposure is not compensated and the standard value of exposure indicator will change.
- When the shooting mode is **Fireworks show** scene mode (, 39), exposure compensation cannot be used.
- When the exposure compensation is set while using a flash, the compensation is applied to both the background exposure and to the flash output.

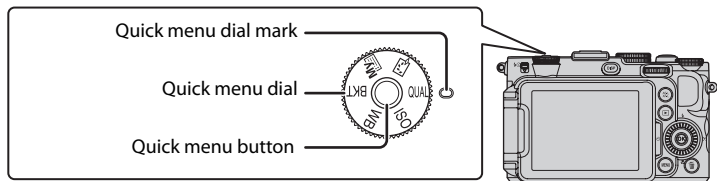
Exposure Compensation During Movie Recording

- The range of exposure compensation values that can be set is between -2 and +2.
- Once movie recording starts, the compensation value is not adjusted even when the exposure compensation dial is rotated.
- If the exposure compensation value is set to a value other than 0.0 when **Shooting mode** (, 108) of the movie custom setting is **Manual**, the exposure is not compensated and the standard value of the exposure indicator will not change either.

Features That Can Be Set Using the Quick Menu Dial (Shooting Mode)

When the quick menu dial is rotated while shooting, the quick menu is displayed for the function that is selected with the mark. When the quick menu is displayed, the quick menu dial mark turns on.

See “Using the Quick Menu” (69) for more information.



Available functions differ according to the shooting mode.

Dial position	Function		P, S, A, M, U1, U2, U3	SCENE	EFFECTS
QUAL	Image quality/Image size (68)	✓	✓	✓	✓
ISO	ISO sensitivity (68)	–	✓	–	–
WB	White balance (68)	–	✓	–	–
BKT	Auto bracketing (68)	–	✓	–	–
My	My Menu (68)	–	✓	–	–
	Picture Control (68)	–	✓	–	–



Features Not Available in Combination

Some features cannot be used in combination with other menu settings (79).

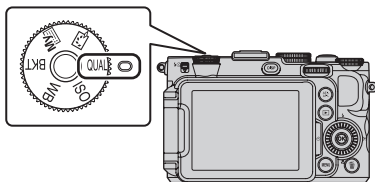
Available Quick Menu

Option	Description	
QUAL Image quality/ Image size	Set the image quality (compression ratio) and image size to be recorded ( 75). The default setting of image quality is Normal , and of image size is  4000×3000 .	75
ISO ISO sensitivity	Higher ISO sensitivity allows you to take pictures of darker subjects. Additionally, even with subjects of similar brightness, pictures can be taken at faster shutter speeds, and blurring caused by camera shake and subject movement can be reduced. When ISO sensitivity is set to Auto (default setting), the camera sets the ISO sensitivity automatically. In M (manual) mode, when set to Auto, ISO 80-200, ISO 80-400 or ISO 80-800, the ISO sensitivity is fixed at ISO 80.	 31
WB White balance	Adjust colors in the image closer to the colors as they appear to the eye. Although Auto (normal) (default setting) can be used under most types of lighting, you can apply the white balance setting suited to the sky conditions or light source to achieve better results if the default setting results are unsatisfactory. - To adjust white balance using color temperature (), select  Choose color temp. of White balance in the first line, and then select the value in Choose color temp. in the second line. - The preset value for preset manual applies commonly to P, S, A, M, U1, U2 and U3 shooting modes, and movie mode.	 33
BKT Auto bracketing	Continuous shooting can be performed while changing the exposure (brightness) automatically with the shutter speed (Tv), aperture value (Av) or ISO sensitivity (Sv), or multiple images can be recorded while varying the white balance (WB). The default setting is OFF .	 36
 My Menu	Display only the menu items that are frequently used for shooting. Options that are displayed in My Menu can be changed from Customize My Menu in the setup menu (110).	 86
 Picture Control	Change the settings for image recording according to the shooting scene or your preferences. The default setting is Standard .	 38

Using the Quick Menu

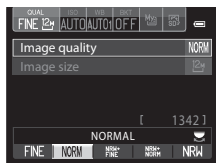
1 Rotate the quick menu dial to select a quick menu.

- Quick menu can also be displayed by pressing the quick menu button.



2 Use the multi selector to select a menu item.

- Press ◀ or ▶ to change the setting value.
The value can also be changed by rotating the main command dial.
- When there are multiple setting items, press ▲ or ▼ to select.

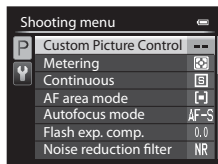
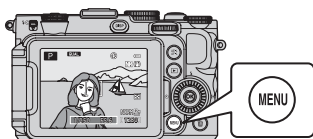


3 After completing the settings, press the quick menu button or the OK button.

- The monitor display reverts to shooting screen.

Features That Can Be Set Using the MENU (Menu) Button (Shooting Mode)

The shooting menu can be set by pressing the **MENU** button in shooting mode.



Available functions differ according to the shooting mode.

Function		P, S, A, M, U1, U2, U3 ¹	SCENE ²	EFFECTS ³
Custom Picture Control (📖71)	–	✓	–	–
Metering (📖71)	–	✓	–	–
Continuous (📖71)	–	✓	–	–
AF area mode (📖71)	–	✓	–	✓ ⁴
Autofocus mode (📖71)	–	✓	–	–
Flash exp. comp. (📖71)	–	✓	–	–
Noise reduction filter (📖71)	–	✓	–	–
Built-in ND filter (📖72)	–	✓	–	–
Distortion control (📖72)	–	✓	–	–
Active D-Lighting (📖72)	–	✓	–	–
Zoom memory (📖72)	–	✓	–	–
Startup zoom position (📖72)	–	✓	–	–
M exposure preview (📖72)	–	✓	–	–
Focus-coupled metering (📖72)	–	✓	–	–
Commander mode (📖72)	–	✓	–	–

¹ In **U1, U2** or **U3** mode, the specialized menu for **U1, U2** or **U3** is displayed in the top tab and the shooting menu is displayed in the second tab from the top. See 📖73 for more information on specialized menu for **U1, U2** or **U3**.

² The type of scene can be selected. See 📖35 for more information.

³ The type of effects can be selected in **Special effects** mode. See 📖45 for more information.

⁴ **Subject tracking** and **Target finding AF** are not available.

Features Not Available in Combination

Some features cannot be used in combination with other menu settings (📖79).

More Information

See “Basic Menu Operations” (📖10) for more information.

Options Available in the Shooting Menu

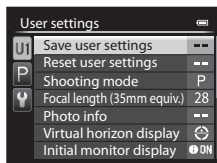
Option	Description	
Custom Picture Control (COOLPIX Custom Picture Control)	Allow you to store the customized settings based in COOLPIX Picture Control, which can set picture editing options for recording images according to the shooting scene or your preferences.	 42
Metering	Select the method that the camera uses to measure the brightness of the subject. The camera adjusts the exposure, which is a combination of shutter speed and aperture value, based on the brightness measurement. The default setting is Matrix .	 43
Continuous	Set the mode used for taking a series of pictures. • The default setting is Single (i.e. only one picture is captured at a time). • When Continuous H, Continuous M, Continuous L, or BSS (39) is set, the pictures are shot continuously while the shutter-release button is fully held down. • If Continuous H: 120 fps, Continuous H: 60 fps, or Multi-shot 16 is set, the specified number of pictures are shot continuously when the shutter-release button is fully held down. • If the Intvl timer shooting is set, the pictures are shot continuously at the set interval of 30 s, 1 min, 5 min, or 10 min when the shutter-release button is fully held down once.	 44
AF area mode	Set how the camera determines the focus area using the autofocus to Face priority ( 85), Auto , Manual , Center (normal) , Center (wide) , Subject tracking or Target finding AF ( 84). • The AF area mode can also be selected by pressing the multi selector  (.	 47
Autofocus mode	When Single AF (default setting) is selected, the camera focuses only while the shutter-release button is pressed halfway. When Full-time AF is selected, the camera focuses even when the shutter-release button is not pressed halfway. You may hear the sound of the camera focusing.	 51
Flash exp. comp.	Adjust the flash output. Use this option when the flash is too bright or too dark. The default setting is 0.0 .	 51
Noise reduction filter	Set the strength of the noise reduction function that is normally performed when recording the picture. The default setting is Normal .	 52

Features That Can Be Set Using the MENU (Menu) Button (Shooting Mode)

Option	Description	
Built-in ND filter	Select On or Off (default setting) for the built-in ND filter. Set this feature to On in conditions such as too bright overexposure results from the subject, so that the amount of light that enters the camera is reduced.	 52
Distortion control	Select whether to correct the peripheral distortion that occurs due to the intrinsic characteristics of lenses. Enabling distortion control reduces the size of the frame, as compared to when distortion control is not enabled. The default setting is Off .	 53
Active D-Lighting	Prevent loss of contrast details in highlights and shadows when shooting images. The default setting is Off .	 53
Zoom memory	When the zoom control is operated while pressing the Fn1 button, the camera changes in steps to the focal length (equivalent to 35mm [135] format of angle of view) of the zoom lens that is set in advance. • The default setting is on  for all the check boxes.	 54
Startup zoom position	When the camera is turned on, the zoom position moves to the focal length (equivalent to 35mm [135] format of angle of view) of the zoom lens that is set in advance. The default setting is 28 mm .	 54
M exposure preview	When On is selected, the exposure setting resulting from the shutter speed and aperture value set in M (manual) mode is reflected in the brightness on the shooting screen. The default setting is Off .	 55
Focus-coupled metering	When On (default setting) is selected and if Metering ( 71) is set to Matrix or Spot and AF area mode ( 71) is set to Manual , the brightness of the subject is measured by giving higher priority to the focus area.	 55
Commander mode	Set how the optional flash unit fires when the flash mode ( 57) is set to  CM (commander mode). The default setting for Flash mode is Standard flash and that for Flash control mode is TTL .	 56

Available Specialized Menu for U1, U2 or U3

In **U1**, **U2** or **U3** mode, the following settings for the specialized menu can be changed, as well as the shooting menu.



Set to **U1**, **U2** or **U3** mode → **MENU** button → **U1**, **U2** or **U3** tab

Option	Description	
Save user settings	The current settings are stored.	52
Reset user settings	The settings saved to U1 , U2 or U3 are reset.	54
Shooting mode	Choose the standard shooting mode (default setting is P). The current flexible program (when set to P), shutter speed (when set to S or M) or aperture value (when set to A or M) settings are also saved.	27
Focal length (35mm equiv.)	Set the zoom position for when the mode dial is set. Select 28 mm (default setting), 35 mm , 50 mm , 85 mm , 105 mm , 135 mm , 200 mm , Current zoom position or Not stored .	-
Photo info	Set whether or not the virtual horizon, histogram and framing grid are displayed on the monitor screen when the mode dial is set. This setting is not applied to the setup menu settings.	110
Virtual horizon display	Set the virtual horizon display for when the mode dial is set. This setting is not applied to the setup menu settings.	110
Initial monitor display	Set the information displayed on the monitor screen when the mode dial is set (default setting is Show info).	9
Flash mode	Set the flash mode for when the mode dial is set.	56
Focus	Set the focus mode for when the mode dial is set. The current focus distance is also saved when the focus mode is MF (manual focus).	62

Features That Can Be Set Using the **MENU** (Menu) Button (Shooting Mode)

Option	Description	
Self-timer	Set the self-timer when the mode dial is set.	59
AF assist	Enable or disable the AF assist mode for when the mode dial is set. This setting is not applied to the setup menu settings.	111

Changing the Image Quality and Image Size

Display the shooting screen → **QUAL** (Quick menu dial) (📖69) → Image quality/Image size

The image quality (compression ratio) and image size can be selected for recording.

- When the mode dial is rotated to  (movie) mode or  CSM (movie custom setting) mode, **Movie options** can be set (📖106).

Available Image Quality

Lower compression ratios result in higher quality pictures, but also larger file sizes, limiting the number of pictures that can be recorded.

Option		Description
FINE	Fine	Fine image quality than Normal , suitable for enlargement or high quality prints. File format: JPEG, compression ratio of about 1:4
NORM	Normal (default setting)	Normal image quality, suitable for most applications. File format: JPEG, compression ratio of about 1:8
NRW+FINE	NRW (RAW) + Fine*	Two images are recorded at the same time: one NRW (RAW) image and one fine-quality JPEG image.
NRW+NORM	NRW (RAW) + Normal*	Two images are recorded at the same time: one NRW (RAW) image and one normal-quality JPEG image.
NRW	NRW (RAW)*	Raw data from the image sensor are saved. Create JPEG image files after shooting using NRW (RAW) processing in the playback menu (📖93). When NRW (RAW) is selected, Image size is reset to  4000×3000. File format: NRW (RAW)

* NRW (RAW) images cannot be selected in scene mode or special effects mode (except for **Zoom exposure** and **Defocus during exposure**).

COOLPIX P7700 NRW (RAW) Images

- The extension of the picture taken is “.NRW.”
- NRW (RAW) images cannot be printed. Creating JPEG images with **NRW (RAW) processing** enables the images to be printed using PictBridge compatible printers or in digital photo labs.
- No editing other than NRW (RAW) processing can be performed for images in the NRW (RAW) format. To edit such images, first create JPEG images using **NRW (RAW) processing** (📖94), and then edit the JPEG images.
- ViewNX 2 needs to be installed on the computer to be able to view NRW (RAW) images on the computer. Capture NX 2 is also compatible with NRW (RAW) images.
- Install ViewNX 2 on a computer using the included ViewNX 2 CD-ROM (See “Using ViewNX 2” (📖97).)
For more information on using ViewNX 2, refer to the on-screen instructions and help information contained in ViewNX 2.

Image Quality Setting

- The setting for image quality is shown by an icon displayed on the monitor during shooting and playback (📖12 to 15).
- The setting is also applied to other shooting modes (except for shooting modes **U1**, **U2** and **U3**).
- NRW (RAW) images cannot be recorded in the following shooting modes.
 - Scene mode
 - Special effect mode (except for **Zoom exposure** and **Defocus during exposure**)When the mode is changed to scene mode or special effect mode (except for **Zoom exposure** and **Defocus during exposure**) from other shooting modes, the image quality is changed according to situation as follows.
 - When **NRW (RAW)** is set, the image quality is changed to **Normal**.
 - When **NRW (RAW) + Fine** or **NRW (RAW) + Normal** is set, the image quality is changed to **Fine** or **Normal** respectively.
- The digital zoom cannot be used when **Image quality** is set to **NRW (RAW)**, **NRW (RAW) + Fine** or **NRW (RAW) + Normal**.
- Some features cannot be used in combination with other menu settings. See “Features Not Available in Combination” (📖79) for more information.

Recording of NRW (RAW) and JPEG Images at the Same Time

- The NRW (RAW) image and the JPEG image that are recorded at the same time have the same file number but with their own file extensions, “.NRW” and “.JPG” (📖100).
- When playing back on the camera, only the JPEG image is displayed.
- Note that when the JPEG image is deleted by pressing the 🗑 button, the NRW (RAW) image that was recorded at the same time is also deleted.

More Information

- See “Number of Exposures Remaining” (📖78) for more information.
- See “File and Folder Names” (📖100) for more information.

Available Image Size

You can set the JPEG image size (amount of pixels) for pictures recorded with an image quality of **Fine** or **Normal**.

The larger the image, the larger the size at which it can be printed or displayed without becoming noticeably “grainy,” limiting the number of pictures that can be recorded.

Conversely, small image sizes are suitable for pictures attached to e-mails or used on web pages. However, printing small images in large print sizes results in the image turning “grainy.”

Options*	Description
 4000×3000 (default setting)	Record pictures with finer detail than those shot at  3264×2448 .
 3264×2448	Good balance between file size and quality; suitable in most situations.
 2272×1704	
 1600×1200	Smaller than  2272×1704 ; for recording more pictures.
 640×480	Record pictures suitable for display on a television with a screen aspect ratio of 4:3, or for e-mail attachment.
 3984×2656	Record pictures with the same aspect ratio (3:2) as those shot with 35mm [135] format film cameras.
 3968×2232	Record pictures with the same aspect ratio (16:9) as wide screen TV.
 3000×3000	Record square pictures.

* The total number of pixels captured, and the number of pixels captured horizontally and vertically.

Example:  **4000×3000** = 12 megapixels, 4000 × 3000 pixels

Image Size Setting

- The setting for the image size is shown by an icon displayed on the monitor during shooting and playback ( 12 to 15).
- The setting is also applied to other shooting modes (except for shooting modes **U1**, **U2** and **U3**).
- The size of JPEG images can be chosen when you create JPEG images from NRW (RAW) images using **NRW (RAW) processing** ( 94) (up to a maximum of 4000 × 3000 pixels).
- Image size** for the JPEG image can be set when **NRW (RAW) + Fine** or **NRW (RAW) + Normal** is selected. However, note that  **3984×2656**,  **3968×2232** and  **3000×3000** cannot be selected.
- Some features cannot be used in combination with other menu settings. See “Features Not Available in Combination” ( 79) for more information.

Number of Exposures Remaining

The following table lists the approximate number of pictures that can be stored on a 4 GB memory card, at each combination of **Image size** (📷77) and **Image quality** (📷75) settings. Note that the number of exposures that can be stored differs depending on the composition of the image (due to JPEG compression). In addition, this number may differ depending on the make of memory card, even if the capacity of the memory card is the same.

After removing the memory card, check the indicator showing the number of exposures that can be stored in the internal memory (approx. 86 MB) on the screen during shooting.

Image size	Image quality	Memory card ¹ (4 GB)	Print size ² (cm/in.)
 4000×3000 (default setting)	Fine Normal NRW (RAW)	620 1,110 140	34 × 25/13 × 10
 3264×2448	Fine Normal	930 1,650	28 × 21/11 × 8
 2272×1704	Fine Normal	1,880 3,350	19 × 14/7.5 × 5.6
 1600×1200	Fine Normal	3,650 6,350	13 × 10/5.3 × 4
 640×480	Fine Normal	20,100 30,100	5 × 4/2 × 1.5
 3984×2656	Fine Normal	700 1,270	34 × 22/13 × 8.8
 3968×2232	Fine Normal	840 1,500	33 × 19/13 × 7.4
 3000×3000	Fine Normal	830 1,470	25 × 25/10 × 10

1 If the number of exposures remaining is 10,000 or more, “9999” is displayed.

2 The print size at an output resolution of 300 dpi.

Print sizes are calculated by dividing the number of pixels by the printer resolution (dpi) and multiplying by 2.54 cm (1 in.). However, even with the same image size setting, images printed at higher resolutions print smaller than the size indicated, and those printed at lower resolutions print larger than the size indicated.

3 The print size of NRW (RAW) images differs according to the image size of the NRW (RAW) processed images (📷94).

Printing Images of Size 1:1

Change the printer setting to “Border” when printing images with the size set to 1:1.

The images may not be printed in 1:1 ratio depending on the printer.

See the instruction manual of the printer or check with the authorized print dealer for further details.

Features Not Available in Combination

Some features cannot be used in combination with other menu settings.

Restricted function	Setting	Description
Flash mode	Focus mode (762)	When ▲ (infinity) is selected for shooting, the flash is not available.
	Image quality (775)	When NRW (RAW) images are recorded, red-eye reduction processing is not performed even if ☹ (auto with red-eye reduction) is set (including JPEG images when both NRW (RAW) and JPEG images were recorded at the same time).
	Continuous (771)	The flash is not available.
	Auto bracketing (768)	The flash is not available.
Self-timer/Smile timer/Remote control	AF area mode (771)	When Subject tracking is selected for shooting, the self-timer/smile timer/remote control are not available.
Focus mode	AF area mode (771)	When Subject tracking is selected, MF (manual focus) is not available.
Image quality	Continuous (771)	When BSS, Multi-shot 16, Continuous H: 120 fps or Continuous H: 60 fps is selected for shooting, NRW (RAW), NRW (RAW) + Fine or NRW (RAW) + Normal is not available.
	Auto bracketing (768)	When WB bracketing is selected for shooting, NRW (RAW), NRW (RAW) + Fine or NRW (RAW) + Normal is not available.
Image size	Image quality (775)	- When Image quality is set to NRW (RAW), Image size is fixed at 4000×3000. - When the image quality is set to NRW (RAW) + Fine or NRW (RAW) + Normal, Image size of the JPEG image can be set. Note, however, that 3984×2656, 3968×2232 and 3000×3000 cannot be selected.
	Continuous (771)	- When Multi-shot 16 is selected for shooting, Image size is fixed at 2560 × 1920 (pixels). - When Continuous H: 120 fps or Continuous H: 60 fps is selected for shooting, Image size is fixed at 1280 × 960 (pixels).
ISO sensitivity	Continuous (771)	When Multi-shot 16, Continuous H: 120 fps or Continuous H: 60 fps is selected for shooting, ISO sensitivity is fixed at Auto .
	Active D-Lighting (772)	- When ISO sensitivity is set to Auto and Active D-Lighting is set to any mode other than Off, the maximum value for ISO sensitivity is set to ISO 800. - When Active D-Lighting is set to any mode other than Off for shooting, 1600, 2000, 2500, 3200 or Hi 1 in ISO sensitivity is not available.

Features Not Available in Combination

Restricted function	Setting	Description
ISO sensitivity	Shooting mode of movie custom setting (📖108)	- If ISO sensitivity is set to Auto when Shooting mode is Manual, ISO sensitivity is fixed at ISO 80. - When Shooting mode is Special effects, ISO sensitivity is switched to Auto.
White balance	Picture Control (📖68)	When Monochrome is selected for shooting, White balance is fixed at Auto (normal) .
Picture Control	Active D-Lighting (📖72)	When using Active D-Lighting for shooting, Contrast in manual adjustment cannot be adjusted.
	Shooting mode of movie custom setting (📖108)	When Shooting mode is Special effects , Picture Control is not available.
Metering	Active D-Lighting (📖72)	Metering is reset to Matrix when Active D-Lighting is set to any mode other than Off .
Continuous/ Auto bracketing	Continuous (📖71)/Auto bracketing (📖68)	Continuous and Auto bracketing are not available simultaneously. Auto bracketing is reset to OFF when Continuous is set to any mode other than Single . The setting for Continuous is reset to Single when Auto bracketing is set to any mode other than OFF .
	Self-timer (📖59)/Remote control (📖55)	Continuous H , Continuous M , Continuous L , or BSS and self-timer/remote control are not available simultaneously. When self-timer or remote control is set, a single picture is shot.
	Smile timer (📖60)	When the camera detects smiling faces and the shutter is released, only one picture is shot. If Intvl timer shooting is set, shooting finishes automatically after one picture is shot.
	Image quality (📖75)	BSS , Multi-shot 16 , Continuous H: 120 fps , Continuous H: 60 fps or White balance bracketing cannot be used when Image quality is set to NRW (RAW) , NRW (RAW) + Fine or NRW (RAW) + Normal .
	Picture Control (📖68)	When Monochrome is selected for shooting, White balance bracketing is not available.
AF area mode	Smile timer (📖60)	The camera takes a picture using face detection regardless of the applied AF area mode option.
	Focus mode (📖62)	When set to MF (manual focus), the AF area mode cannot be set.
	Picture Control (📖68)	When Target finding AF is selected and Picture Control is set to Monochrome , AF area mode operates using the Auto setting.
	White balance (📖68)	When Target finding AF is selected, and if the white balance is set to Preset manual , Incandescent , FL3 in Fluorescent or Choose color temp. , or fine adjustment of each white balance setting is performed, AF area mode operates using the Auto setting.

Restricted function	Setting	Description
Autofocus mode	Smile timer (60)	Autofocus mode option cannot be changed when shooting with the smile timer.
	Focus mode (62)	When the focus mode is set to (Infinity), the focus mode operates using the Single AF setting.
	AF area mode (71)	When AF area mode is set to Face priority , Subject tracking or Target finding AF , AF area mode operates using the Single AF setting.
Built-in ND filter	Shooting mode of movie custom setting (108)	When Shooting mode is set to Special effects , the built-in ND filter is automatically controlled.
Active D-Lighting	ISO sensitivity (68)	When ISO sensitivity is set to 1600, 2000, 2500, 3200 or Hi 1 , Active D-Lighting is not available.
Photo info	Smile timer (60)	The virtual horizon is not displayed when shooting with the smile timer.
	AF area mode (71)	- The virtual horizon is not displayed when shooting with Face priority. - The virtual horizon is not displayed when shooting with Subject tracking. After the subject has been registered (during subject tracking), the histogram is not displayed. - The virtual horizon and histogram are not displayed when shooting with Target finding AF.
Print date	Image quality (75)	When Image quality is set to NRW (RAW) , NRW (RAW) + Fine or NRW (RAW) + Normal , print date is not available.
	Continuous (71)	When Continuous H: 120 fps or Continuous H: 60 fps is selected for shooting, print date is not available.
Sound settings	Continuous (71)	When Continuous H , Continuous M , Continuous L , Continuous H: 120 fps , Continuous H: 60 fps , BSS , or Multi-shot 16 is selected for shooting, shutter sound is disabled.
	Auto bracketing (68)	When AE Bracketing (Tv) , AE Bracketing (Av) or AE Bracketing (Sv) is selected for shooting, shutter sound is disabled.
Digital zoom	Smile timer (60)	The digital zoom cannot be used when shooting with the smile timer.
	Focus mode (62)	The digital zoom cannot be used when MF (manual focus) is selected.
	Image quality (75)	The digital zoom cannot be used when Image quality is set to NRW (RAW) , NRW (RAW) + Fine or NRW (RAW) + Normal .
	Continuous (71)	The digital zoom cannot be used when Multi-shot 16 is selected for shooting.
	AF area mode (71)	The digital zoom cannot be used when shooting with Subject tracking .
	Zoom memory (4, 72)	The digital zoom cannot be used while the Fn1 button is pressed.

Notes on Digital Zoom

- The digital zoom cannot be used with certain shooting modes.
- When the digital zoom is in effect, selectable options for AF area mode or metering mode are restricted (75).

The Control Range of the Shutter Speed

The control range of the shutter speed differs depending on the aperture value or the ISO sensitivity setting. Additionally, the control range changes in the following continuous shooting settings.

P, S, A, M Modes

Setting		Control range	
		P, S, A mode	M mode
ISO sensitivity ( 68) ¹	Auto ² , ISO 80-200 ² , ISO 80-400 ² , ISO 80-800 ²	1/4000 ³ to 1 s	1/4000 ³ to 60 s
	ISO 80, 100	1/4000 ³ to 15 s	
	ISO 125	1/4000 ³ to 13 s	
	ISO 160	1/4000 ³ to 10 s	
	ISO 200	1/4000 ³ to 8 s	
	ISO 250	1/4000 ³ to 6 s	
	ISO 320	1/4000 ³ to 5 s	
	ISO 400	1/4000 ³ to 4 s	1/4000 ³ to 30 s
	ISO 500	1/4000 ³ to 3 s	
	ISO 640	1/4000 ³ to 2.5 s	
	ISO 800	1/4000 ³ to 2 s	
	ISO 1000	1/4000 ³ to 1.6 s	1/4000 ³ to 15 s
	ISO 1250	1/4000 ³ to 1.3 s	
	ISO 1600	1/4000 ³ to 1 s	
	ISO 2000	1/4000 ³ to 1/1.3 s	1/4000 ³ to 8 s
	ISO 2500	1/4000 ³ to 1/1.6 s	
	ISO 3200	1/4000 ³ to 1/2 s	
	Hi 1	1/4000 ³ to 1/4 s	1/4000 ³ to 2 s

Setting		Control range	
		P, S, A mode	M mode
Continuous (📖71)	Continuous H, Continuous M, Continuous L, BSS	1/4000 ³ to 1/8 s	1/4000 ³ to 1/8 s
	Multi-shot 16	1/4000 to 1/30 s	1/4000 to 1/30 s
	Continuous H: 120 fps	1/4000 to 1/125 s	1/4000 to 1/125 s
	Continuous H: 60 fps	1/4000 to 1/60 s	1/4000 to 1/60 s
	Intvl timer shooting	1/4000 ³ to 1 s	1/4000 ³ to 1 s

¹ The ISO sensitivity setting is restricted depending on the continuous shooting setting (📖79).

² In **M** mode, the ISO sensitivity is fixed at ISO 80.

³ The maximum shutter speed value varies depending on the aperture value. The shutter speed becomes slower when the aperture value is smaller. When the aperture value is set to f/2 (wide-angle zoom position) or f/4 (telephoto zoom position), the shutter speed can be set to maximum 1/2000 second. When the aperture value is set to f/4.5 to f/8 (wide-angle position) or f/7.1 to f/8 (telephoto zoom position), the shutter speed can be set to maximum 1/4000 second.

During Movie Custom Setting Mode

Setting		Control range
Shooting mode (📖108)	A Mode	1/8000 to 1/30 s
	M Mode	1/4000 to 1/30 s

Focusing on Subject

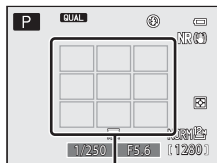
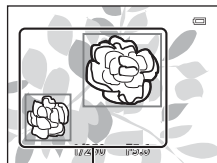
The focus area or focus range for adjusting focus varies depending on the shooting mode and focus mode (162).

- In **P, S, A, M, U1, U2, U3** or special effects mode, an area for adjusting focus can be set by selecting **AF area mode** (171) in the shooting menu.

Using the Target Finding AF

When **AF area mode** in **P, S, A, M, U1, U2** or **U3** mode is set to **Target finding AF**, the camera will adjust the focus during the following operations if you press the shutter-release button halfway.

- When the camera detects the main subject, it focuses on that subject. When the subject is in focus, the focus areas (up to 12 areas) that match up with the size of the subject will light in green. When detecting a human face, the camera focuses on it as a priority.
- The camera has 9 focus areas, and if it does not detect the main subject, it automatically selects the focus areas containing the subject closest to the camera. When the subject is in focus, the focus areas that are in focus light in green.

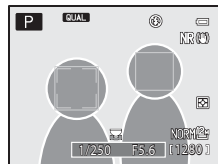


✓ Notes on Target Finding AF

- Depending on shooting conditions, the subject that the camera determines to be the main subject may vary.
- The camera may not detect the main subject appropriately in the following situations:
 - When the image shown on the monitor is very dark or bright
 - When the main subject lacks clearly defined colors
 - When the shot is framed so that the main subject is on the edge of the monitor
 - When the main subject is composed of a repeating pattern
- The camera has 9 focus areas, and in the following situations, it automatically selects the focus areas containing the subject closest to the camera:
 - When **White balance** is set to **Preset manual, Incandescent, FL3** in **Fluorescent** or **Choose color temp.**, or fine adjustment of each white balance setting is performed
 - When **Picture Control** is set to **Monochrome**

Using Face Detection

In the following settings, the camera uses face detection to automatically focus on human faces. If the camera detects more than one face, a double border is displayed around the face that the camera will focus on, and single borders are displayed around the other faces.



Setting	Number of faces that can be detected	Focus area (double border)
Face priority is selected for AF area mode (📖71)	Up to 12	The face closest to the camera
Scene auto selector, Portrait, Night portrait, Pet portrait* scene mode (📖35)		
☺ (Smile timer) (📖60)	Up to 3	The face closest to the center of the frame

* If **Pet portrait auto release** is switched to **OFF** when **Pet portrait** is selected, the camera will detect human faces (📖42).

- When using **Face priority**, if the shutter-release button is pressed halfway while no faces are detected or while framing a shot with no faces in it, the camera automatically selects the focus areas (up to 9) that contain the subject closest to the camera.
- When **Scene auto selector** is selected, the focus area changes depending on which scene the camera selects.
- When using **Portrait** or **Night portrait**, if no faces are detected when the shutter-release button is pressed halfway, the camera will focus on the subject at the center of the frame.
- When ☺ (smile timer) is selected, if you press the shutter-release button halfway while no faces are detected, the camera will focus on the subject at the center of the frame.

✓ Notes on Face Detection

- The camera's ability to detect faces depends on a variety of factors, including whether or not the subject is facing the camera. Additionally, the camera may be unable to detect faces in the following situations:
 - When faces are partially hidden by sunglasses or otherwise obstructed
 - When faces take up too much or too little of the frame
- When the frame includes more than one face, the faces detected by the camera and the face on which the camera focuses depend upon a variety of factors, including the direction in which the subject is facing.
- In some rare cases, such as those described in "Autofocus" (📖86), the subject may not be in focus even though the double border turns green. If the camera does not focus, try "Focus Lock" (📖86).

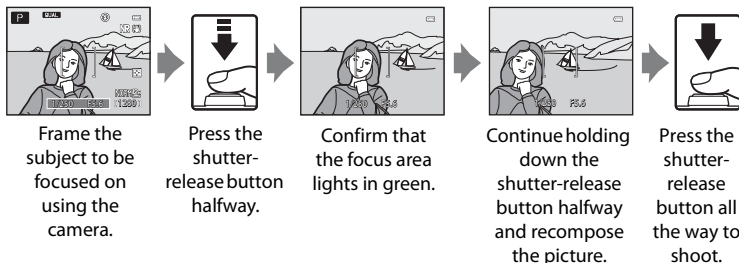
📷 Viewing Pictures Taken Using Face Detection

When zooming in on an image displayed in full-frame playback mode by rotating the zoom control toward **T** (📖91), the image is enlarged at the center of the face that was detected during shooting (📖91).

Focus Lock

Use focus lock to focus on off-center subjects when center is selected for AF area mode.

- Be sure that the distance between the camera and the subject does not change.
- When the shutter-release button is pressed halfway, the exposure is locked.



- Instead of pressing the shutter-release button halfway, you can also press the **AE-L/AF-L** (AE-L/AF-L) button to shoot with focus lock (📖113) (except for **Scene auto selector** (📖36) in scene mode).

Autofocus

Autofocus may not perform as expected in the following situations. In some rare cases, the subject may not be in focus despite the fact that the focus area or focus indicator lights in green.

- Subject is very dark
- Objects of sharply differing brightness are included in the scene (e.g. the sun behind the subject makes that subject appear very dark)
- No contrast between the subject and surroundings (e.g. a portrait subject, wearing a white shirt, is standing in front of a white wall)
- Several objects are at different distances from the camera (e.g., an animal inside a cage)
- Subjects with repeating patterns (window blinds, buildings with multiple rows of similarly shaped windows, etc.)
- Subject is moving rapidly

In these situations, try pressing the shutter-release button halfway to refocus several times, or focus on another subject and use focus lock. When using focus lock, be sure that the distance between the camera and the subject with which focus was locked is the same as that for the actual subject.

The camera can also focus using manual focus (📖62, 📷2).

Speedlights (External Flash Unit)

With this camera, various features are available in combination with the Speedlight (external flash) supported by the Nikon Creative Lighting System (CLS) (p88). Use the Speedlight when the built-in flash cannot provide sufficient lighting.

The following Speedlights and Wireless Speedlight Commander can be used for the camera.

Speedlights	SB-910, SB-900, SB-800, SB-700, SB-600, SB-400, SB-R200*
Wireless Speedlight Commander	SU-800

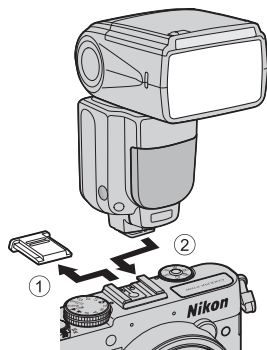
* Speedlight used for remote flash. Attachment Ring SX-1 cannot be mounted on this camera. To use the SB-R200, it must be attached to the Speedlight Stand AS-20.

See our latest product catalogs or websites for up-to-date information on Speedlights that can be used for the COOLPIX P7700.

The built-in flash is set to  (off) automatically when using Speedlights or Wireless Speedlight Commander. While  is displayed on the monitor screen, the Speedlight flash mode is also displayed on the monitor, and it can be set with the same procedure as the built-in flash (p56).

How to Attach the Speedlight

- Remove the accessory shoe cover before attaching the Speedlight or Wireless Speedlight Commander as shown on the right (1).
- When the built-in flash is raised, gently push to lower the flash until it clicks shut.
- Refer to the instruction manual of your Speedlight for more information on how to attach the Speedlight and details on how to use it.
- Attach the accessory shoe cover when the Speedlight is not in use.



✓ Note on External Flash

Attempting to attach external flashes that do not support this camera may damage the camera and the external flash.

Use Only Nikon Flash Accessories

Use only Nikon Speedlights. Negative voltages or voltages over 250 V applied to the accessory shoe could not only prevent normal operation, but damage the sync circuitry of the camera or flash.

Features That Can Be Used in Combination With the Speedlight

- SB-910, SB-900, SB-800, SB-700 or SB-600

			CLS compatible Speedlight			
			SB-910 SB-900	SB-800	SB-700	SB-600
Single flash unit	i-TTL	i-TTL-BL flash ¹	✓	✓	✓	✓
		Standard i-TTL flash	✓ ³	✓ ³	✓	✓ ³
	AA	Auto aperture flash	✓ ⁴	✓ ⁴	–	–
	A	Non-TTL auto flash	✓ ⁴	✓ ⁴	–	–
	GN	Distance priority manual flash	✓	✓	✓	–
	M	Manual flash	✓	✓	✓	✓
	RPT	Repeating flash	✓	✓	–	–
Advanced wireless lighting (AWL)	Master flash unit	Instruction to flash unit ²	✓	✓	✓	–
		i-TTL	✓	✓	✓	–
		AA	✓	✓	–	–
		M	✓	✓	✓	–
		RPT	✓	✓	–	–
	Remote flash unit	i-TTL	✓	✓	✓	✓
		AA	✓	✓	–	–
		M	✓	✓	✓	✓
		RPT	✓	✓	✓	✓
	Transmission of flash color temperature information		✓	✓	✓	✓
	Flash mode setting from camera		–	–	–	–

¹ Not available when metering mode is set to **Spot**.

² The remote flash unit can control Group A only.

³ Can also be set on the Speedlight.

⁴ The selection of AA mode and A mode is performed using the custom setting for the Speedlight.

- SU-800, SB-400 or SB-R200

			CLS compatible Speedlight		
			SU-800	SB-400	SB-R200
Single flash unit	i-TTL	i-TTL-BL flash ¹	—	✓	—
		Standard i-TTL flash	—	✓	—
	AA	Auto aperture flash	—	—	—
	A	Non-TTL auto flash	—	—	—
	GN	Distance priority manual flash	—	—	—
	M	Manual flash	—	✓ ³	—
	RPT	Repeating flash	—	—	—
Advanced wireless lighting (AWL)	Master flash unit	Instruction to flash unit ²	✓	—	—
		i-TTL	i-TTL flash	—	—
		AA	Auto aperture flash	—	—
		M	Manual flash	—	—
		RPT	Repeating flash	—	—
	Remote flash unit	i-TTL	i-TTL flash	—	✓
		AA	Auto aperture flash	—	—
		M	Manual flash	—	✓
		RPT	Repeating flash	—	—
	Transmission of flash color temperature information		—	✓	—
	Flash mode setting from camera		—	✓	—

¹ Not available when metering mode is set to **Spot**.

² The remote flash unit can control Group A only.

³ This setting can be made using the flash mode (M/56) of this camera. When **M** (manual) is set, the flash is forcibly fired at the flash output that was set. If other flash mode is set, i-TTL Flash is enabled.

Notes on i-TTL Flash

- The monitor pre-flashes are fired to measure the reflecting light from a subject in order to adjust the flash output of the Speedlight.
- When shooting using i-TTL-BL flash, the flash output is adjusted with consideration for the balance between a subject and its background light.
- When shooting using Standard i-TTL flash, the flash output is adjusted to achieve the standard exposure value for the main subject without consideration for the background light. This setting is optimal for taking pictures with emphasis on the main subjects.
- When shooting using i-TTL flash, set the flash control mode of the Speedlight to i-TTL before taking pictures (except SB-400).
- When shooting using SB-700 or SB-400 and if **Metering** of the camera is set to **Matrix** or **Center-weighted**, i-TTL-BL flash is set. If **Metering** of the camera is set to **Spot**, Standard i-TTL flash is set.



Notes on Speedlights

- This camera does not support Auto FP High-Speed Sync, FV lock, red-eye reduction or AF-assist for multi-area AF when using Speedlights.
- The power zoom function can be used with Speedlights SB-910, SB-900, SB-800, SB-700 or SB-600 and the zoom head position is automatically set depending on the focal length of the lens.
- When using Speedlights SB-910, SB-900, SB-800, SB-700 or SB-600, the edges of pictures shot at ranges less than 2 m (6 ft 7 in.) on the wide-angle zoom position may appear dark. In such cases, use the wide panel.
- When set to STBY (standby), the Speedlight turns on and off at the same time as the camera. Confirm on the Speedlight that the Ready-light is on.
- Advanced Wireless Lighting shooting can be performed by setting SB-910, SB-900, SB-800 or SB-700 attached to COOLPIX P7700 to master flash, or by setting SU-800 to the Commander mode, and setting SB-910, SB-900, SB-800, SB-700, SB-600 or SB-R200 to remote flash. (When shooting with COOLPIX P7700, the remote flash setting is only applicable to Group A.)
- Advanced Wireless Lighting shooting can be performed also by using the built-in flash in Commander mode. (Only applicable to Group A and fixed at 3 CH) (📖 57, 72, 📷 56).
- Refer to the instruction manual of your Speedlight for more information.



Notes on Using the Remote Flash Unit

- Set up the remote flash unit in a position close to the subject from the camera to ensure the light from the Speedlight to enter the sensor window.
- Aside from monitor pre-flashes, the master flash unit emits a minute amount of flashes to control the remote flash unit. When shooting a subject at a short distance from the master flash unit, these minute amounts of flashes may cause adverse effects and the proper exposure may not be achieved. To reduce such adverse effects, use the wide panel for the master flash when the master flash unit is directly facing a subject that is being shot at a short distance.

Playback Features

Playback Zoom

Select an image to be enlarged in playback mode and rotate the zoom control toward **T** (Q).

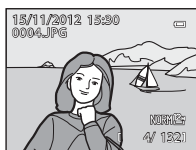
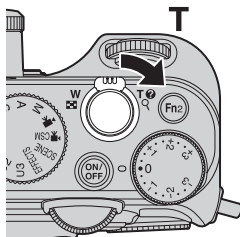


Image is displayed in full-frame playback mode.



Image is zoomed in.

Display position guide

Operations During Playback Zoom

Function	Operation	Description
Adjusting the magnification	W (checkered flag) / T (Q)	- The zoom increases up to about 10x. - The zoom can also be adjusted by rotating the command dial.
Moving the display position		Move the display position.
Cropping	MENU	Crop only the displayed area of the image and save as a separate file (18).
Returning to full-frame playback mode	OK	Return to full-frame playback mode.

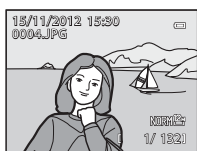
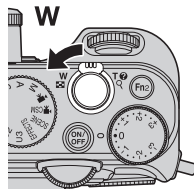
Enlarging Images Recorded with Face Detection or Pet Detection

Pictures taken using face detection (85) or pet detection (42) are enlarged at the center of the face that was detected during shooting (excepting images recorded by **Continuous** (71) or **AE Bracketing** (Tv), **AE Bracketing** (Av) or **AE Bracketing** (Sv) (68)). If the camera detected multiple faces, use **▲**, **▼**, **◀**, and **▶** to display a different face. Change the zoom ratio and press **▲**, **▼**, **◀**, or **▶** to zoom in on an area of the image where there are no faces.

Viewing Several Images (Thumbnail Playback and Calendar Display)

Rotate the zoom control toward **W** () in playback mode.

This function will display several images at the same time, making it easy to find the desired image.



Full-frame playback mode



Image thumbnail display
(4, 9, 16 and 72 images per screen)



Calendar display

Operations During Thumbnail Playback and Calendar Display

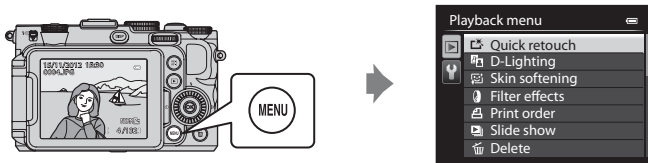
Function	Operation	Description
Changing the number of images displayed	W () / T ()	- Change the number of images to be displayed (4, 9, 16 and 72 images per screen). - When 72 images are displayed, rotate the zoom control toward W () to switch to calendar display. - When calendar is displayed, rotate the zoom control toward T () to switch to 72-image display.
Selecting an image or date		- In thumbnail display mode, select an image. - In calendar display mode, select a date. - An image or date can also be selected by rotating the main command dial.
Returning to full-frame playback mode		- In thumbnail display mode, the selected image is displayed in full-frame playback mode. - In calendar display mode, the first image captured on the selected date is displayed in full-frame playback mode.

Note on Calendar display

Pictures taken when the camera's date is not set are treated as images captured on "January 1, 2012."

Features That Can Be Set Using the MENU (Menu) button (Playback Mode)

When viewing images in full-frame playback mode or thumbnail playback mode, press the **MENU** button to set the playback menu (10).



Available Playback Menus

Option	Description	10
Quick retouch ^{1, 2, 3}	Create retouched copies in which contrast and saturation have been enhanced.	12
D-Lighting ^{1, 3}	Create copies with enhanced brightness and contrast, brightening dark portions of an image.	12
Skin softening ^{1, 2, 3}	When this feature is enabled, the camera detects faces in pictures taken and creates a copy with softer facial skin tones.	13
Filter effects ^{1, 3}	Apply a variety of effects using digital filter. The available effects are Soft, Selective color, Cross screen, Fisheye, Miniature effect, Painting and Vignette .	14
Print order ^{4, 5}	When using a printer to print images saved on the memory card, the print order function can be used to select which images are printed, and how many copies of each image are printed.	60
Slide show	Images saved in the internal memory or on a memory card are played back in an automatic slide show.	62
Delete ⁵	Delete an image. Multiple images can be deleted.	63
Protect ⁵	Protect selected images and movies from accidental deletion.	64
Rotate image ^{3, 4, 5}	Specify the orientation in which saved images are displayed in playback mode.	64
Small picture ^{1, 3}	Create a small copy of the picture taken. This feature is useful for creating copies for display on Web pages or e-mail attachments.	15

Features That Can Be Set Using the MENU (Menu) button (Playback Mode)

Option	Description	
 Voice memo ^{3, 6}	Use the camera's microphone to record voice memos and attach them to the picture taken. Playback and deletion of voice memos can also be performed.	 65
 Copy ⁵	Copy images between the internal memory and a memory card. This function can also be used to copy movies.	 66
 Black border ^{1, 3}	Create a new picture surrounded by a black border.	 15
 Straighten ^{1, 3}	Compensate for the slanting of pictures taken.	 16
NRW NRW (RAW) processing ^{1, 3, 5}	Create JPEG-format copies by performing RAW processing within the camera for NRW (RAW) images ( 75) without having to use a computer.	 16
 Sequence display options	Display a sequence of images shot continuously as individual images, or display only the key picture of a sequence.	 67
 Choose key picture ⁵	Change the key picture for the series of pictures that were shot continuously (Pictures in a sequence,  8). • When changing this setting, select the desired sequence before displaying the menu.	 67

¹ This function is used to edit the currently selected image and save it as a separate file from the original file.

Note, however, that the following pictures cannot be edited.

- Pictures taken using an aspect ratio of 16:9, 3:2, or 1:1 (except when using the black border editing function)
- Pictures taken using **Easy panorama** or **3D photography**

Note also that there is a restriction on retouching edited images ( 11).

² Pictures that were extracted from a movie cannot be edited using the quick retouch or skin softening function.

³ This function cannot be used for pictures in the sequence when only the key picture is displayed. To use this function, press the  button to display individual images before displaying the menu.

⁴ The function cannot be applied to pictures taken in scene mode **3D photography**.

⁵ Select an image in the image selection screen. See "Using the Screen for Selecting Images" ( 95) for more information.

⁶ A voice memo cannot be attached to a picture that was shot using **Easy panorama**.

See "Editing Still Images" ( 10) and "The Playback Menu" ( 60) in the Reference Section for more information about each function.

Using the Screen for Selecting Images

The image selection screen is displayed in the following menus.

Only one image can be selected for some menu items, while for other menu items, multiple images can be selected.

Functions for which only one image can be selected	Functions for which multiple images can be selected
• Playback menu: Rotate image* (0064), NRW (RAW) processing (0016), Choose key picture (0067) • Setup menu: Select an image in Welcome screen (0068) • PictBridge (A printer is connected) : Print selection (0022)	• Playback menu: Select images in Print order (0060), Erase selected images in Delete (0063), Protect (0064), Selected images in Copy (0066) • PictBridge (A printer is connected) : Print selection in Print menu (0023)

Follow the procedure described below to select images.

1 Rotate the multi selector, or press ◀ or ▶ to choose the desired image.

- Rotate the zoom control toward **T** (Q) to switch to full-frame playback mode, or **W** (R) to switch to 12 thumbnails display.
- For functions for which only one image can be selected, proceed to step 3.



2 Press ▲ or ▼ to select ON or OFF (or the number of copies).

- When **ON** is selected, a check mark (✓) is displayed with the image. Repeat steps 1 and 2 to select additional images.



3 Press the (OK) button to apply the image selection.

- With selections such as **Erase selected images**, the confirmation dialog is displayed. Follow the instructions on the screen.

Connecting the Camera to a TV, Computer, or Printer

You can enhance your enjoyment of images and movies by connecting the camera to a TV, computer, or printer.

- Before connecting the camera to an external device, make sure the remaining battery level is sufficient and turn the camera off. For information about the connection methods and subsequent operations, refer to the documentation included with the device in addition to this document.



How to open the connector cover



HDMI mini connector (Type C)
USB/Audio/video output connector
Insert the plug straight.

Viewing images on a TV

19



You can view the camera's images and movies on a TV.
Connection method: Connect the video and audio plugs of the included Audio Video Cable to the TV's input jacks. Alternatively, connect a commercially available HDMI cable (Type C) to the TV's HDMI input jack.

Viewing and organizing images on a computer

97



If you transfer images to a computer, you can perform simple retouching and manage image data in addition to playing back images and movies.

Connection method: Connect the camera to the computer's USB input jack with the included USB Cable.

- Before connecting to a computer, install ViewNX 2 on the computer using the included ViewNX 2 CD-ROM. See 99 for more information about using the included ViewNX 2 CD-ROM, and transferring images to a computer.

Printing images without using a computer

21



If you connect the camera to a PictBridge-compatible printer, you can print images without using a computer.

Connection method: Connect the camera directly to the printer's USB input jack with the included USB Cable.

Using ViewNX 2

ViewNX 2 is an all-in-one software package which enables you to transfer, view, edit and share images.

Install ViewNX 2 using the included ViewNX 2 CD-ROM.



Installing ViewNX 2

Compatible Operating Systems

Windows

- Windows 7 Home Basic/Home Premium/Professional/Enterprise/Ultimate (Service Pack 1)
- Windows Vista Home Basic/Home Premium/Business/Enterprise/Ultimate (Service Pack 2)
- Windows XP Home Edition/Professional (Service Pack 3)

Macintosh

- Mac OS X (version 10.6.8, 10.7.4)

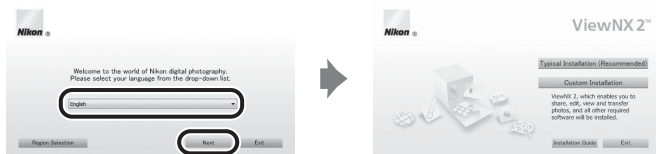
Refer to the Nikon website for the latest information on operating system compatibility.

- 1** Start the computer and insert the ViewNX 2 CD-ROM into the CD-ROM drive.

- Mac OS: When the **ViewNX 2** window is displayed, double-click the **Welcome** icon.

2 Select a language in the language selection dialog to open the installation window.

- If the desired language is not available, click **Region Selection** to choose a different region and then choose the desired language (the **Region Selection** button is not available in the European release).
- Click **Next** to display the installation window.



3 Start the installer.

- We recommend clicking **Installation Guide** in the installation window to check the installation help information and system requirements before installing **ViewNX 2**.
- Click **Typical Installation (Recommended)** in the installation window.
- Follow the on-screen instructions to install the software.

4 Exit the installer when the installation completion screen is displayed.

- Windows: Click **Yes**.
- Mac OS: Click **OK**.

The following software is installed:

- ViewNX 2 (consisting of the three modules below)
 - Nikon Transfer 2: For transferring images to the computer
 - ViewNX 2: For viewing, editing, and printing transferred images
 - Nikon Movie Editor: For basic editing of transferred movies
- Panorama Maker (for creating a single panorama photo using a series of images shot in panorama assist scene mode)
- QuickTime (Windows only)

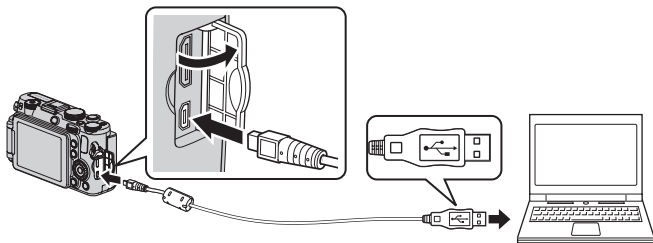
5 Remove the ViewNX 2 CD-ROM from the CD-ROM drive.

Transferring Images to the Computer

1 Choose how images will be copied to the computer.

Choose one of the following methods:

- **Direct USB connection:** Turn the camera off and ensure that the memory card is inserted in the camera. Connect the camera to the computer using the included USB Cable. The camera automatically turns on. To transfer images that are saved in the camera's internal memory, remove the memory card from the camera before connecting it to the computer.



- **SD card slot:** If your computer is equipped with an SD card slot, the card can be inserted directly in the slot.
- **SD card reader:** Connect a card reader (available separately from third-party suppliers) to the computer and insert the memory card.

If a message is displayed prompting you to choose a program, select Nikon Transfer 2.

• When using Windows 7

If the dialog shown at right is displayed, follow the steps below to select Nikon Transfer 2.

- 1 Under **Import pictures and videos**, click **Change program**. A program selection dialog will be displayed; select **Import File using Nikon Transfer 2** and click **OK**.
- 2 Double-click **Import File**.



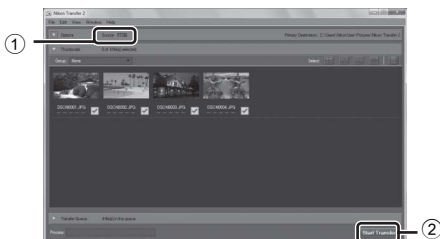
If the memory card contains a large number of images, it may take a while for Nikon Transfer 2 to start. Wait until Nikon Transfer 2 starts.

✓ Connecting the USB Cable

The connection may not be recognized if the camera is connected to the computer via a USB hub.

2 Transfer images to the computer.

- Confirm that the name of the connected camera or removable disk is displayed as the “Source” on the “Options” title bar of Nikon Transfer 2 (①).
- Click **Start Transfer** (②).



- At default settings, all the images on the memory card will be copied to the computer.

3 Terminate the connection.

- If the camera is connected to the computer, turn the camera off and disconnect the USB cable.
- If you are using a card reader or card slot, choose the appropriate option in the computer operating system to eject the removable disk corresponding to the memory card and then remove the card from the card reader or card slot.

Viewing Images

Start ViewNX 2.

- Images are displayed in ViewNX 2 when transfer is complete.
- Consult online help for more information on using ViewNX 2.



Starting ViewNX 2 Manually

- **Windows:** Double-click the **ViewNX 2** shortcut on the desktop.
- **Mac OS:** Click the **ViewNX 2** icon in the Dock.

Recording and Playing Back Movies

Recording Movies

Movies can be recorded using the following 2 modes.

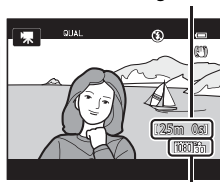
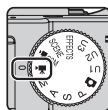
 (movie) mode	You can record basic movies (with sound). When Movie options is set to HS movies, you can record slow motion movies and fast motion movies (🔑29).
 CSM (movie custom setting) mode	You can set the Shooting mode and ISO sensitivity and enjoy recording more authentic movies (with sound).

1 Rotate the mode dial to (or .

- The movie options icon indicates the type of movie recorded.
The default setting is  **HD 1080p★** (1920×1080) (🔑28).
- The amount of available recording time is displayed on the monitor screen. When a memory card is not inserted,  is displayed and movie is saved to the internal memory.

* The maximum recording time shown in the illustration differs from the actual value.

Available movie recording time*



Movie option

2 Press the shutter-release button all the way to start recording.

- The camera focuses at the center of the frame. The focus area is not displayed when the movie is recorded.
- See "Focus and Exposure During Movie Recording" (📖102) for more information.
- Recording stops automatically when the maximum movie length has been recorded.



3 Press the shutter-release button all the way to end recording.

Focus and Exposure During Movie Recording

- The focus can be adjusted during movie recording in the following manner in accordance with the **Autofocus mode** (📖108) setting of the movie menu.
 - **AF-S Single AF** (default setting): The focus is locked when movie recording starts. To perform the autofocus function during movie recording, press the AE-L/AF-L (AE-L/AF-L) button (📖2).
 - **AF-F Full-time AF**: The focus is adjusted repeatedly even during movie recording. To lock the exposure or focus during movie recording, press the AE-L/AF-L (AE-L/AF-L) button. To cancel the exposure or focus, press the AE-L/AF-L (AE-L/AF-L) button again.
- When the focus mode (📖62) is **MF** (manual focus), adjust the focus manually. The focus can be adjusted by pressing the multi selector ▲ (far) or ▼ (near) while recording movies.
- Autofocus may not perform as expected (📖86). Should this occur, try **MF** (manual focus) (📖62, 📖82) or set **Autofocus mode** in the movie menu to **AF-S Single AF** (default setting) and then use focus lock (📖86) to record.
- When **Shooting mode** (📖108) of the movie custom setting mode is set to **Aperture-priority auto** or **Manual**, set the aperture value or shutter speed before recording a movie (📖48). The aperture value and shutter speed cannot be set during movie recording.

✓ Notes on Using Zoom During Movie Recording

- The zoom indicator is not displayed during movie recording.
- The camera can zoom up to 2x with digital zoom during movie recording.
- When the digital zoom is used, the image quality will deteriorate. When the movie options setting is **720p HD 720p (1280×720)** and **VGA (640×480)**, the digital zoom can be used up to 1.55x and 2x, respectively without causing the image quality deteriorate.
- If you start recording a movie without using digital zoom, and you keep rotating the zoom control toward **T**, the zoom stops at the maximum optical zoom ratio. Remove your finger from the zoom control and then rotate it again toward **T** to activate digital zoom. When movie recording ends, digital zoom is cancelled.
- When **Shooting mode** (📖108) of the movie custom setting mode is set to **Aperture-priority auto** or **Manual**, optical zoom cannot be used during movie recording.

✓ Note on Recording Images and Saving Movies

The indicator showing the number of exposures remaining or the indicator showing the maximum movie length flashes while images are being recorded or while a movie is being saved. **Do not open the battery-chamber/memory card slot cover or remove the battery or memory card while an indicator is flashing.** Doing this could result in loss of data, or in damage to the camera or the memory card.

✓ Notes on Movie Recording

- When saving a movie onto a memory card, a memory card with an SD speed class of Class 6 or higher is recommended (📖21). If the transfer speed of the card is slow, the movie recording may end unexpectedly.
- The sounds of zoom control operation, zoom, autofocus, vibration reduction or aperture control when the brightness changes may be recorded.
- The following phenomena may be seen on the monitor screen while recording movies. These phenomena are saved in the recorded movies.
 - Banding may occur in images under fluorescent, mercury-vapor, or sodium-vapor lighting
 - Subjects that move quickly from one side of the frame to the other, such as a moving train or car, may appear skewed
 - The entire movie image may be skewed when the camera is panned
 - Lighting or other bright areas may leave residual images when the camera is moved
- The flash does not fire.

✓ Notes on the Camera Temperature

- The camera may become warm when recording movies for an extended period of time or when the camera is used in a hot area.
- When the temperature inside the camera becomes extremely high during movie recording, the camera may automatically stop recording to prevent internal damage to the camera. A 10-second countdown indicator (📖10s) appears on the monitor, and then the camera will turn off after 5 seconds.



Recording HS (High Speed) Movies

When **Movie options** (📖106) in quick menu is set to **VGA₁₂₀ HS 120 fps (640×480)**, **720₆₀ HS 60 fps (1280×720)** or **1080₁₅ HS 15 fps (1920×1080)** in  (movie) mode, movies than can be played back in slow motion or fast motion can be recorded.

External Microphones

Instead of the built-in microphone, a Stereo Microphone ME-1 (available separately; 🎧102) can be connected to the external microphone connector (📖2) to record sound during movie recording.

More Information

- See “Maximum Movie Length” (🎧29) for more information.
- See “File and Folder Names” (🎧100) for more information.

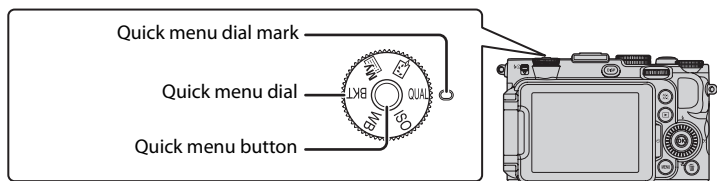
Changing Movie Mode and Movie Custom Setting Mode Settings

- Features That Can Be Set Using the Multi Selector → 📖55
- Exposure Compensation → 📖66
- Features That Can Be Set Using the Quick Menu Dial → 📖105
- Features That Can Be Set Using the **MENU** (Menu) Button.
 - Movie menu → 📖108
 - Setup menu → 📖110

Features That Can Be Set Using the Quick Menu Dial (Movie Mode, Movie Custom Setting Mode)

When the quick menu dial is rotated while recording movies, the quick menu is displayed for the function that is selected with the mark. When the quick menu is displayed, the quick menu dial mark lights.

- See “Using the Quick Menu” (📖69) for more information.



Available functions differ according to the movie mode.

Dial position	Function	Movie (movie)	CSM (movie custom setting)
QUAL	Movie options (📖106)	✓	✓
ISO	ISO sensitivity (📖106)	–	✓
WB	White balance (📖106)	✓	✓
BKT	Auto bracketing	–	–
My Menu	My Menu	–	–
Picture Control	Picture Control (📖106)	–	✓

📌 Features Not Available in Combination

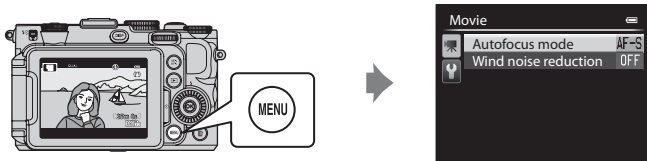
Some features cannot be used in combination with other menu settings (📖79).

Available Quick Menu

Option	Description	
QUAL Movie options	Select the type of movie to be recorded. In  (movie) mode, you can set high speed (HS) movies that can be played back in slow motion or fast motion. The default setting is  HD 1080p ★ (1920×1080).	 28
ISO ISO sensitivity	Higher ISO sensitivity allows you to take pictures of darker subjects. When ISO sensitivity is set to Auto (default setting), the camera sets the ISO sensitivity automatically. If ISO sensitivity is set to Auto when Shooting mode of the movie custom setting menu ( 107) is Manual, ISO sensitivity is fixed at ISO 80.	 31
WB White balance	Adjust colors in the image closer to the colors as they appear to the eye. Although Auto (normal) (default setting) can be used under most types of lighting, you can apply the white balance setting suited to the sky conditions or light source to achieve better results if the default setting results are unsatisfactory. - To adjust white balance using color temperature (), select  Choose color temp. of White balance in the first line, and then select the value in Choose color temp. in the second line. - The preset value for preset manual applies commonly to P, S, A, M, U1, U2 and U3 shooting modes, and movie mode.	 33
 Picture Control	Change the settings for image recording according to the shooting scene or your preferences. The default setting is Standard. When Shooting mode ( 108) of the movie menu is set to Aperture-priority auto or Manual, Picture Control can be set.	 38

Features That Can Be Set Using the MENU (Menu) Button (Movie Mode, Movie Custom Setting Mode)

In movie mode or movie custom setting mode, press the **MENU** button to set movie menu or movie custom setting menu.



Available functions differ according to the movie mode.

Function	Movie (movie)	CSM (movie custom setting)
Shooting mode (108)	–	✓
Custom Picture Control (108)	–	✓
Autofocus mode (108)	✓	✓
Built-in ND filter (108)	–	✓
Wind noise reduction (108)	✓	✓

Features Not Available in Combination

Some features cannot be used in combination with other menu settings (79).

More Information

See “Basic Menu Operations” (10) for more information.

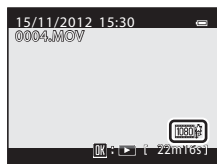
Available Movie Menus

Option	Description	
Shooting mode	Select the standard shooting mode from Aperture-priority auto (default setting), Manual or Special effects. When Special effects is selected, select one of the 7 special effects. • Painting (default setting), Cross process, Soft, Nostalgic sepia, High key, Low key, Selective color See 45 for more information on characteristics of each special effect.	 58
Custom Picture Control (COOLPIX Custom Picture Control)	Allow you to store the settings customized in COOLPIX Picture Control, which can set picture editing options for recording images according to the shooting scene or your preferences.	 42
Autofocus mode	Select how the camera focuses when recording normal speed movies. Single AF (default setting) where the focus is locked when movie recording begins, or Full-time AF where the camera focuses continuously during movie recording can be selected. When Full-time AF is selected, the sound of the camera focusing may be heard in recorded movies. If you want to prevent the sound of the camera focusing from being recorded, select Single AF.	 59
Built-in ND filter	Select On or Off (default setting) for the built-in ND filter. Set this feature to On in conditions such as too bright overexposure results from the subject, so that the amount of light that enters camera is reduced. • When Shooting mode is set to Special effects, the built-in ND filter is automatically controlled.	 52
Wind noise reduction	Set whether or not to reduce wind noise from the microphone during movie recording. During playback, not only wind noise, but other sounds may also become difficult to hear. The default setting is Off .	 59

Playing Back Movies

1 Press the  (playback) button to select playback mode.

- Press the multi selector to select a movie.
- Movies can be recognized by the movie options icon (101).



2 Press the  button to play back a movie.

Operations Available During Movie Playback

Rotate the multi selector or the main command dial to fast forward or rewind.

Playback controls appear at the top of the monitor.

Press the multi selector  or  or sub-command dial to select an icon of playback control, then press the  button to perform the following operations.



During playback
Volume indicator

To	Use	Description
Rewind		Rewind the movie while the  button is pressed down.
Advance		Advance the movie while the  button is pressed down.
Pause		The following operations can be performed with the playback controls at the top of the monitor while playback is paused.
		 Rewind the movie by one frame. Hold down the  button to rewind continuously.*
		 Advance the movie by one frame. Hold down the  button to advance continuously.*
		 Extract and save only the required parts of the movie ( 26).
		 Save the extracted frame from a movie as a still picture ( 27).
		Resume playback.
End		Return to full-frame playback mode.

* The movie can also be advanced or rewound by one frame by rotating the multi selector or main command dial.

To delete a movie, use full-frame playback mode (32) or thumbnail playback mode (92) to select a movie and press the  button (33).

Adjusting the Volume

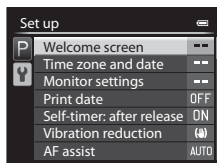
Press the zoom control **T/W** (2) during playback.

General Camera Setup

The Setup Menu

Press the **MENU** button →  (setup) tab ( 11)

From the menu screen, select the  tab to display the setup menu, and then you can change the following settings.



Option	Description	
Welcome screen	Set whether or not the welcome screen is displayed when power is turned on. The welcome screen image can be selected.	 68
Time zone and date	Set settings related to the camera's date and time. The Time zone setting allows you to specify the time zone where the camera is mainly used and whether or not daylight saving time is in effect. When the  travel destination is set, the camera automatically calculates the time difference between the travel destination and the  home time zone, and saves images using the date and time of the travel destination.	 69
Monitor settings	Set the image display after shooting and the screen brightness. When using Photo info , set whether or not to display virtual horizon, histograms, and framing grid on the monitor screen. When using Virtual horizon display , set the virtual horizon indicator to either Circle (default setting) or Bars .	 71
Print date	Imprint the shooting date and time on pictures at the time of shooting. The default setting is Off . Dates cannot be imprinted in the following situations. - When the scene mode is set to Easy panorama , Panorama assist , or 3D photography - When Image quality ( 75) is set to NRW (RAW) , NRW (RAW) + Fine or NRW (RAW) + Normal - When Continuous H: 120 fps or Continuous H: 60 fps is selected for Continuous ( 71) - During movie recording	 72
Self-timer: after release	Set whether or not to cancel the setting after shooting pictures with the self-timer. The default setting is Exit self-timer mode .	 73

Option	Description	
Vibration reduction	Reduce blurring caused by camera shake when shooting. The default setting is On . When using a tripod to stabilize the camera, set this feature to Off to prevent this feature from malfunctioning.	 73
AF assist	When set to Auto (default setting), the AF-assist illuminator () lights if shooting in dark surroundings to help the camera focus. Even if Auto is selected, the AF-assist illuminator may not light depending on the position of the focus area or the scene mode that is selected.	 74
ISO sensitivity step value	Change the step value of the sensitivity to be set for ISO sensitivity of the quick menu. The default setting is 1 step .	 74
Digital zoom	When set to On (default setting), rotating and holding the zoom control toward T () triggers the digital zoom () if the optical zoom is at the maximum telephoto zoom position. When set to Crop , the digital zoom is limited to the range (to the zoom position ) at which image quality of the shot still picture does not deteriorate. The digital zoom cannot be used simultaneously in certain settings such as the shooting mode.	 75
Zoom speed	Set the zoom operation speed. When set to Auto (default setting), zoom operates at Normal speed during still picture shooting. Zoom operates at Quiet speed (slower than normal speed) during movie recording.	 76
Fixed aperture	When set to On in A or M shooting mode, zoom operates while keeping changes in the aperture value to a minimum. The default setting is Off .	 76
Sound settings	Turn various camera sounds on and off. In the default setting, beep sounds are on. The operation sound is disabled in certain settings such as shooting mode.	 77
Record orientation	When set to Auto (default setting), the orientation data is recorded with the picture taken.	 77
Rotate tall	When set to On (default setting), the images are rotated automatically in accordance with the camera's vertical orientation when they are played back.	 78
Auto off	Set the amount of time that passes before the monitor is turned off to save power. The default setting is 1 min .	 78

The Setup Menu

Option	Description	
Format memory/ Format card	Format the internal memory (only when a memory card is not inserted) or the memory card (when a memory card is inserted). All data stored in the internal memory or on the memory card is deleted during formatting and cannot be restored. Be sure to transfer important images to a computer and save them before formatting.	 79
Language	Change the camera's display language.	 79
TV settings	Adjust settings for connection to television. - When the camera is connected to a television using an audio/video cable but no picture is displayed on the television, set Video mode to NTSC or PAL according to the type of signal compatible with the television. - HDMI settings can be set.	 80
External mic sensitivity	The external microphone sensitivity is set to Auto (default setting), High , Medium or Low .	 80
Customize command dials	Swap the function of the main command dial for that of the sub-command dial when the exposure is set ( 48). The default setting is No swap . This option is available only when the shooting mode is P, S, A, M, U1, U2 or U3.	 81
Command dial rotation	Change the direction of operation when the command dial is rotated during shooting. The default setting is Standard rotation . This option is available when the shooting mode is P, S, A, M, U1, U2 or U3.	 81
Multi selector right press	When set to AF area mode (default setting), the AF area mode setting ( 71) is displayed if the multi selector  () is pressed during shooting. In order not to display the AF area mode setting even if  () is pressed, set to Off .	 81
Delete button options	When set to Press twice to delete , the image can be deleted by pressing the  button again while the delete confirmation message is displayed. The default setting is Disable second press .	 82

Option	Description	
AE/AF lock button	Select the function to be performed when the AE-L/AF-L (AE-L/AF-L) button is pressed during shooting. When set to AE/AF lock button (default setting), both focus and exposure are locked if the AE-L/AF-L (AE-L/AF-L) button is pressed while shooting. When the scene mode is Scene auto selector (36), AF-L (AF lock) using the AE-L/AF-L (AE-L/AF-L) button is disabled.	 82
Fn1 + shutter button	Set the function to be performed when the shutter-release button is pressed while pressing the Fn1 (function 1) button during shooting. The default setting is Off. This option is available when the shooting mode is P, S, A, M, U1, U2 or U3.	 83
Fn1 + command dial	Set the function to be performed when the command dial is rotated while pressing the Fn1 (function 1) button during shooting. The default setting is Off. This option is available when the shooting mode is P, S, A, M, U1, U2, U3 or movie custom setting mode.	 84
Fn1 + selector dial	Set the function to be performed when the multi-selector is rotated while pressing the Fn1 (function 1) button during shooting. The default setting is Off. This option is available when the shooting mode is P, S, A, M, U1, U2, U3 or movie custom setting mode.	 84
Fn1 guide display	When set to On (default setting), if the Fn1 (function 1) button is pressed during shooting, a guide for the functions assigned to the Fn1 + shutter button, Fn1 + command dial and Fn1 + selector dial is displayed on the monitor screen. In the shooting modes or settings during which the Fn1 button cannot be used,  will be displayed.	 85
Fn2 button	Set the operation to be performed when the Fn2 (function 2) button is pressed during shooting. The default setting is Off.	 85
Customize My Menu	Register frequently used menu items in My Menu (68) (maximum of 5).	 86
Reset file numbering	When Yes is selected, the sequential numbering of file numbers is reset. After resetting, a new folder is created and the file number for the next image taken starts from "0001."	 87

Option	Description	
GPS options	Set this option when the GPS Unit (available separately) is connected. Record GPS data: When set to On (default setting), signals are received from the GPS satellites and positioning starts. The position information (latitude and longitude) can be recorded on the pictures to be shot. Synchronize: Signals from the GPS satellites are used to set the date and time of the camera's internal clock (only when Record GPS data is set to On).	 87
Eye-Fi upload	Set whether or not to enable the function for sending images to a computer using a commercially available Eye-Fi card. The default setting is Enable .	 89
MF distance indicator units	Set the unit of distance for displaying at screen gauge, to either m (meter) (default setting) or ft (feet) when using manual focus.	 90
Reverse indicators	Set the exposure indicator to be displayed when shooting mode is M and +/- display direction of indicator for setting the bracketing.	 90
Flash control	When Auto (default setting) is set, the optional Speedlight (external flash unit) will fire when it is used. When the Speedlight is not used, the built-in flash will fire.	 90
Reset all	Reset the camera's settings to their default values. Some of the settings such as Time zone and date and Language and user settings that were saved for mode dial U1, U2 and U3 are not reset.	 91
Firmware version	Display the current camera firmware version.	 94



Technical Notes and Index

Troubleshooting		2
Caring for the Products		9
The Camera.....		9
The Battery		10
The Battery Charger.....		11
The Memory Cards		12
Caring for the Camera		13
Cleaning.....		13
Storage		13
Specifications.....		14
Index		19

Troubleshooting

If the camera fails to function as expected, check the list of common problems below before consulting your retailer or Nikon-authorized service representative. Refer to the page numbers in the right-most column for more information.

- See “Error Messages” (🔍95) for more information.

Power, Display, Settings Issues

Problem	Cause/Solution	
The camera is on but does not respond.	• Wait for recording to end. • If the problem persists, turn the camera off. If the camera does not turn off, remove and reinsert the battery or batteries or, if you are using an AC adapter, disconnect and reconnect the AC adapter. Note that although any data currently being recorded will be lost, data that have already been recorded will not be affected by removing or disconnecting the power source.	– 23
Camera cannot be turned on.	• Battery is exhausted. • Camera cannot be turned on if the battery-chamber/memory card slot cover is open. • When the monitor is closed with the screen facing inward, the power cannot be turned on even if the power switch or  button is pressed. When a computer or printer is connected to the camera, the camera automatically turns on even if the monitor is closed. If you turn off the camera and turn it on again while it is connected to the computer or printer, open the monitor and press the power switch.	22 18 8
Camera turns off without warning.	• Battery is exhausted. • If no operations are performed for a while, camera has turned off automatically by auto off to save power. • Inside of the camera has become hot. Leave the camera off until the inside of the camera has cooled. • At low temperatures, the camera and the battery may not function normally.	22 23 – 🌞10
The monitor is blank.	• Camera is off. • Battery is exhausted. • Standby mode for saving power: Press the power switch, shutter-release button or  button, or rotate the mode dial. • Camera and computer are connected via USB cable. • Camera and TV are connected via audio/video cable or HDMI cable. • Interval timer shooting in progress.	23 22 23 96, 99 96, 🔍19 🔍45
Monitor screen is hard to see.	• Adjust monitor screen brightness. • Monitor is dirty. Clean monitor screen.	110, 🔍71 🌞13

Problem	Cause/Solution	
Date and time of recording are not correct.	- If the camera clock has not been set ("Date not set" indicator flashes during shooting), still pictures have a time stamp of "00/00/0000 00:00"; and movies are dated "01/01/12 00:00." Set the correct date and time using Time zone and date in the setup menu. - The camera clock is not as accurate as a normal clock, such as watches. Check camera clock regularly against more accurate timepieces and reset as required.	24, 110,  69 110,  69
No information displayed in monitor.	Shooting and photo information may be hidden. Press the DISP button until shooting information or photo information is displayed.	9
Print date not available.	Time zone and date in the setup menu has not been set.	24, 110,  69
Date not appearing on pictures even when Print date is enabled.	- A shooting mode that does not support print date is selected. - Another function that is set now is restricting the print date. - The date cannot be imprinted onto a movie.	110,  72 79 –
Screen for setting time zone and date is displayed when camera is turned on.	Clock battery is exhausted; all settings were restored to their default values.	25
Camera settings reset.		
Reset file numbering cannot be done.	Reset file numbering cannot be applied when the folder number reaches 999 and there are images in the folder. Change the memory card, or format the internal memory/memory card.	113,  87
Monitor is turned off, and the power-on lamp flashes quickly.	Battery temperature is high. Turn off camera, and allow battery to cool down before resuming use. After the lamp flashes for 3 minutes, the camera turns off automatically, but you can also press the power switch to turn it off manually.	23
Camera temperature rises.	When functions such as movie recording or sending images using an Eye-Fi card are used for a long time, or when the camera is used in a location with a high ambient temperature, the camera temperature may rise. This is not a malfunction.	103

Shooting Issues

Problem	Cause/Solution	
Cannot set to shooting mode.	Disconnect the HDMI cable or USB cable.	96, 99,  19,  21
No picture can be taken.	- When the camera is in playback mode, press the  button or shutter-release button. - When menus are displayed, press the MENU button. - Battery is exhausted. - When the scene mode is Night portrait or Backlighting with HDR set to Off, raise the flash. - If the flash mode icon flashes when the shutter-release button is pressed halfway, the flash is charging. - When using the Speedlight, refer to the Speedlight instruction manual to check the settings. - When shooting using Advanced Wireless Lighting photography, set the group setting to Group A. When using the built-in flash as the commander, set the channel of the flash unit to 3 CH. - When the flash setting is enabled for a group other than Group A, disable the flash setting.	32 10 22 37, 40, 56 56 87
Cannot take 3D images	In some shooting conditions, such as when the subject moves or the subject is dark or low in contrast, the second shot may not be taken or the 3D image may not be saved.	–
Camera cannot focus.	- Incorrect focus mode setting. Check or change the setting. - The intended subject is one with which autofocus does not perform well. - Set AF assist in the setup menu to Auto. - Subject is not in focus area when shutter-release button is pressed halfway. - The focus mode is set to MF (manual focus). - Turn camera off and then on again.	62, 63 86 111,  74 30, 71 62 23
Colored stripes appear on the monitor when shooting.	Colored stripes may appear when shooting subjects with repeating patterns (such as window blinds); this is not a malfunction. The colored stripes will not appear in captured images or recorded movies. However, when using Continuous H: 120 fps or HS 120 fps (640×480) , the colored stripes may be seen in the captured images and recorded movies.	–
Pictures are blurred.	- Use flash. - Use vibration reduction. - Use BSS (Best Shot Selector). - Use a tripod to stabilize the camera (use with the self-timer for better results).	56 111 71 59
Bright specks appear in pictures shot using flash.	Flash is reflecting off particles in air. Set the flash to  (off).	57

Problem	Cause/Solution	
Flash does not fire.	- Flash is set to  (off). - A shooting mode where flash cannot fire is selected. - Another function that is set now is restricting the flash. - The built-in flash does not fire when an external flash unit (optional) is used. - When shooting using Advanced Wireless Lighting photography, set the group setting to Group A. When using the built-in flash as the commander, set the channel of the remote flash unit to 3 CH. See the instruction manual of your Speedlight (external flash unit).	57 64 79 87 87
The digital zoom is not available.	Off or Crop is selected for Digital zoom in the setup menu. - When Scene auto selector, Portrait, Night portrait, Easy panorama in Panorama, Pet portrait or 3D photography is selected in scene mode, the digital zoom cannot be used. - The digital zoom cannot be used when Zoom exposure is selected in special effects mode. - Other functions that restrict the use of digital zoom are set.	111 36, 36, 37, 41, 42, 43 46 79
Image size not available.	- Another function that is set now is restricting Image size. - When the scene mode is set to Easy panorama in Panorama or 3D photography, the image size is fixed.	79 41, 43
No sound when shutter is released.	Off is selected for Shutter sound under Sound settings in the setup menu. Sports, Museum or Pet portrait is selected in scene mode. - Other functions that restrict the use of the shutter sound are set. - Do not block the speaker.	111 37, 39, 42 79 2
AF-assist illuminator does not light.	Off is selected for AF assist in the setup menu. Even when Auto is set, AF-assist illuminator may not light depending on the focus area position or scene mode.	111
Pictures appear smeared.	Lens is dirty. Clean lens.	 13
Colors are unnatural.	White balance does not match light source.	68,  33
Ring-shaped or rainbow-colored bands are seen on the screen or the shot image.	When the subject is backlit or when shooting with an extremely bright light source in the display, such as in sunlight, ring-shaped or rainbow-colored bands may appear on the image. Change the position of the light source or remove it from the display, and try shooting again.	–
The image taken becomes grainy.	As the subject is dark, shutter speed is too slow or ISO sensitivity is too high. - Use flash. - Specify a lower ISO sensitivity setting.	56 68,  31

Troubleshooting

Problem	Cause/Solution	
Pictures are too dark (underexposed).	- Flash is set to  (off). - Flash window is blocked. - Subject is beyond flash range. - Adjust exposure compensation. - Raise the ISO sensitivity. - Subject is backlit. Raise the flash, and set the scene mode Backlighting with HDR set to Off or set the flash mode to  (fill flash). On is selected for Built-in ND filter in the shooting menu.	57 28 56 66 68,  31 40, 56 72
Pictures are too bright (overexposed).	- Adjust exposure compensation. - Use the Built-in ND filter setting in the shooting menu.	66 72,  52
Areas not affected by red-eye are also corrected.	When  (auto with red-eye reduction) or “fill flash with red-eye reduction” of the Night portrait scene mode is applied during shooting, In-Camera Red-Eye Fix may, in very rare cases, be applied to areas not affected by red-eye. Set the flash mode to other than  (auto with red-eye reduction), select a scene mode other than Night portrait , and resume shooting.	37, 56
Skin softening results are not as expected.	- Skin softening may not produce the desired results depending on shooting conditions. - For pictures with 4 or more faces, try using Skin softening in the playback menu.	44 93,  13
Saving images takes time.	It may take more time to save images in the following situations. - When the noise reduction function is in operation - When flash is set to  (auto with red-eye reduction) - When taking pictures in the following scene modes. Hand-held in Night landscape HDR set to other than Off in Backlighting Easy panorama in Panorama Continuous in the shooting menu is set to Continuous H: 120 fps or Continuous H: 60 fps - When using smile timer while shooting - When using Active D-Lighting while shooting - When Image quality is set to NRW (RAW), NRW (RAW) + Fine or NRW (RAW) + Normal	– 57 38 40 41 71,  44 60 72,  53 75
Cannot set or use Continuous or Auto bracketing .	Another function that is set now is restricting the Continuous or Auto bracketing .	79
Cannot set COOLPIX Picture Control.	Another function that is set now is restricting COOLPIX Picture Control.	79

Playback Issues

Problem	Cause/Solution	
File cannot be played back.	- File was overwritten or renamed by computer or another make or model of camera. - File cannot be played back during interval timer shooting. - NRW (RAW) images or movies recorded with cameras other than COOLPIX P7700 cannot be played back.	– 71 75, 101
Cannot play a sequence.	- Pictures shot continuously with cameras other than COOLPIX P7700 cannot be played as a sequence. - Check the Sequence display options setting.	– 94,  67
Cannot zoom in on picture.	- Playback zoom cannot be used with movies, small pictures, or cropped copies of size 320 × 240 pixels or smaller. - Playback zoom may not be available for pictures taken with cameras other than COOLPIX P7700. 3D images cannot be enlarged when the camera is connected via HDMI and they are played back in 3D.	– – 43
Cannot record or play back voice memo.	- Voice memos cannot be attached to movies. - Voice memos cannot be attached to pictures taken with cameras other than COOLPIX P7700, and voice memos recorded by other cameras cannot be played back.	109 94
Pictures and movies cannot be edited.	- Confirm the conditions that are required for editing pictures or movies. - Pictures and movies taken with cameras other than COOLPIX P7700 cannot be edited.	94,  11,  26 –
Pictures are not displayed on television.	Video mode or HDMI is not correctly set in the TV settings setup menu. - Cables are connected to both the HDMI mini connector and USB/audio video connector. - Memory card contains no pictures. Replace memory card. Remove memory card to play back pictures from internal memory.	112,  80 96 20
Nikon Transfer 2 does not start when camera is connected to a computer.	- Camera is off. - Battery is exhausted. - USB cable is not correctly connected. - Camera is not recognized by the computer. - Confirm that the operating system used is compatible with the camera. - Computer is not set to launch Nikon Transfer 2 automatically. For more information on Nikon Transfer 2, refer to help information contained in ViewNX 2.	23 22 96 – 97 100
Pictures to be printed are not displayed.	- Memory card contains no pictures. Replace memory card. - Remove memory card to print pictures from internal memory. - Pictures taken by 3D photography cannot be printed.	20 21 43

Troubleshooting

Problem	Cause/Solution	
Cannot select paper size with camera.	Paper size cannot be selected from the camera in the following situations, even for PictBridge compatible printers. Use the printer to select paper size. • The paper size selected using the camera is not compatible with the printer. • A printer that automatically sets the paper size is being used.	 22,  23 –

Caring for the Products

The Camera

To ensure continued enjoyment of this Nikon product, observe the following precautions when using or storing the device.

Be sure to read and follow the warnings of "For Your Safety" (📖vi to 📖viii) thoroughly before using the products.

✔ **Keep Dry**

The device will be damaged if immersed in water or subjected to high humidity.

✔ **Do Not Drop**

The product may malfunction if subjected to strong shock or vibration.

✔ **Handle the Lens and All Moving Parts with Care**

Do not apply force to the lens, lens cover, monitor, memory card slot, or battery chamber. These parts are easily damaged. Applying force to the lens cover could result in camera malfunction or damage to the lens. Should the monitor break, care should be taken to avoid injury caused by broken glass and to prevent the liquid crystal from the display touching the skin or entering the eyes or mouth.

✔ **Do Not Point the Lens at Strong Light Sources for Extended Periods**

Avoid pointing the lens at the sun or other strong light sources for extended periods when using or storing the camera. Intense light may cause deterioration of the image sensor, producing a white blur effect in photographs.

✔ **Keep away from Strong Magnetic Fields**

Do not use or store this device in the vicinity of equipment that generates strong electromagnetic radiation or magnetic fields. Strong static charge or the magnetic fields produced by equipment such as radio transmitters could interfere with the monitor, damage data saved on the memory card, or affect the product's internal circuitry.

✔ **Avoid Sudden Changes in Temperature**

Sudden changes in temperature, such as when entering or leaving a heated building on a cold day, can cause condensation to form inside the device. To prevent condensation, place the device in a carrying case or a plastic bag before exposing it to sudden changes in temperature.

✔ **Turn the Product off Before Removing or Disconnecting the Power Source or the Memory Card**

Do not remove the battery while the product is on, or while images are being saved or deleted. Forcibly cutting power in these circumstances could result in loss of data or in damage to product memory or internal circuitry.

Notes on the Monitor

- Monitors and electronic viewfinders are constructed with extremely high precision; at least 99.99% of pixels are effective, with no more than 0.01% being missing or defective. Hence while these displays may contain pixels that are always lit (white, red, blue, or green) or always off (black), this is not a malfunction and has no effect on images recorded with the device.
- Images on the monitor may be difficult to see under bright lighting.
- The monitor is lit by an LED backlight. Should the monitor begin to dim or flicker, contact your Nikon-authorized service representative.

The Battery

- Be sure to read and follow the warnings of “For Your Safety” (vi to viii) thoroughly before using the battery.
- Check the battery level before using the camera and replace or charge the battery if necessary. Do not continue charging once the battery is fully charged as this will result in reduced battery performance. Whenever possible, carry a fully charged spare battery when taking pictures on important occasions.
- Do not use the battery at ambient temperatures below 0°C (32°F) or above 40°C (104°F).
- Charge the battery indoors with an ambient temperature of 5°C to 35°C (41°F to 95°F) before use.
- When the battery temperature is between 0°C and 10°C (32°F to 50°F) or 45°C to 60°C (113°F to 140°F), the chargeable capacity may decrease.
- The battery is not charged at ambient temperatures below 0°C (32°F) or above 60°C (140°F).
- Note that the battery may become hot during use; wait for the battery to cool before charging. Failure to observe these precautions could damage the battery, impair its performance, or prevent it from charging normally.
- On cold days, the capacity of batteries tends to decrease. Be sure that the battery is fully charged before heading outside to take pictures in cold weather. Keep spare batteries in a warm place and exchange as necessary. Once warmed, a cold battery may recover some of its charge.
- Dirt on the battery terminals can prevent the camera from functioning. Should the battery terminals become dirty, wipe them off with a clean, dry cloth before use.

- If the battery will not be used for some time, insert it in the camera and run it flat before removing it for storage. The battery should be stored in a cool location with an ambient temperature of 15°C to 25°C (59°F to 77°F). Do not store the battery in hot or extremely cold locations.
- Always remove the battery from the camera or battery charger when it is not being used. When inserted, minute amounts of current are drawn from the battery even when not in use. This may result in excessive draining of the battery and complete loss of function. Turning the camera on or off while the battery is exhausted can result in reduced battery life. When the battery level is low, be sure to charge the battery before using it.
- Recharge the battery at least once every six months and completely exhaust it before returning it to storage.
- After removing the battery from the camera or battery charger, attach the included terminal cover to the battery and store it in a cool place.
- A marked drop in the time a fully-charged battery retains its charge, when used at room temperature, indicates that the battery needs to be replaced. Purchase a new EN-EL14 battery.
- Replace the battery when it no longer holds a charge. Used batteries are a valuable resource. Please recycle used batteries in accordance with local regulations.

The Battery Charger

- Be sure to read and follow the warnings of "For Your Safety" (📖vi to 📖viii) thoroughly before using the battery charger.
- The included Battery Charger is for use only with a Rechargeable Li-ion Battery EN-EL14.
- The MH-24 is compatible with AC 100-240 V, 50/60 Hz electrical outlets. When using in other countries, use a commercially available plug adapter as necessary. For more information about plug adapters, consult your travel agency.

The Memory Cards

- Use only Secure Digital memory cards. See “Approved Memory Cards” (📖21).
- Be sure to observe the precautions in the memory card documentation when you use the memory card.
- Do not affix labels or stickers to the memory card.
- Do not format the memory card using a computer.
- When a memory card that has been used in another device is used for the first time, be sure to format it with this camera.
When a new memory card is used, it is recommended to format it with this camera first.
- Formatting permanently deletes all data in the memory card. Be sure to transfer important pictures to a computer before formatting.
- If the error message “Card is not formatted. Format card?” is displayed when you insert a memory card into this camera, the memory card must be formatted. If the memory card contains images you wish to keep, select **No** and save those images on your computer before formatting the memory card. To format the card, select **Yes** and press the **OK** button.
- Do not perform the following during formatting, while data is being written to or deleted from the memory card, or during data transfer to a computer. Failure to observe this precaution could result in loss of data or damage to the memory card:
 - Open the battery-chamber/memory card slot cover to remove the battery or memory card.
 - Turn off the camera
 - Disconnect the AC adapter

Caring for the Camera

Cleaning

Lens	Avoid touching glass parts with your fingers. Remove dust or lint with a blower (typically a small device with a rubber bulb attached to one end that is pumped to produce a stream of air out the other end). To remove fingerprints, oily substances, or other stains that cannot be removed with a blower, carefully wipe the lens with a dry soft cloth or eyewear cleaning cloth, using a spiral motion that starts at the center of the lens and working toward the edges. Do not wipe the lens forcibly or with a hard material. Failure to observe this precaution could result in damage or trouble. If this fails, clean the lens using a cloth lightly dampened with commercial lens cleaner.
Monitor	Remove dust or lint with a blower. To remove fingerprints, oily substances or other stains, carefully wipe the monitor with a dry soft cloth or eyewear cleaning cloth. Do not wipe the monitor forcibly or with a hard material. Failure to observe this precaution could result in damage or trouble.
Body	Use a blower to remove dust, dirt, or sand, then wipe gently with a soft, dry cloth. After using the camera at the beach or other sandy or dusty environment, wipe off any sand, dust, or salt with a dry cloth lightly dampened with fresh water and dry thoroughly. Note that foreign matter inside the camera could cause damage not covered by the warranty.

Do not use volatile organic solvents such as alcohol or thinner, chemical detergents, anticorrosive agents, or anti-fogging agents.

Storage

Remove the battery if the camera will not be used for an extended period. Do not store the camera with naphtha or camphor moth balls, or in any of the following locations:

- Next to equipment that produces strong electromagnetic fields, such as televisions or radios
- Exposed to temperatures below -10°C (14°F) or above 50°C (122°F)
- Places that are poorly ventilated or subject to humidity of over 60%

To prevent mold or mildew, take the camera out of storage at least once a month. Turn the camera on and release the shutter a few times before putting the camera away again.

Be sure to read and follow the warnings given in “The Battery” (🔋10) of “Caring for the Products” to store the battery.

Specifications

Nikon COOLPIX P7700 Digital Camera

Type	Compact digital camera
Number of effective pixels	12.2 million
Image sensor	1/1.7-in. type CMOS; approx. 12.76 million total pixels
Lens	7.1x optical zoom, NIKKOR lens
Focal length	6.0-42.8 mm (angle of view equivalent to that of 28-200 mm lens in 35mm [135] format)
f/-number	f/2-4
Construction	13 elements in 10 groups (2 ED lens elements)
Digital zoom magnification	Still pictures: Up to 4x (angle of view equivalent to that of approx. 800 mm lens in 35mm [135] format) Movies: Up to 2x (angle of view equivalent to that of approx. 400 mm lens in 35mm [135] format)
Vibration reduction	Lens shift
Autofocus (AF)	Contrast-detect AF
Focus range	• [W]: Approx. 50 cm (1 ft 8 in.) - ∞, [T]: Approx. 80 cm (2 ft 8 in.) - ∞ • Macro close-up mode: Approx. 2 cm (0.8 in.) (at a wide-angle zoom position) - ∞ (All distances measured from center of front surface of lens)
Focus-area selection	Face priority, auto (9-area automatic selection), center (wide, normal), manual with 99 focus areas, subject tracking, target finding AF
Monitor	7.5 cm (3-in.), approx. 921k-dot, wide viewing angle TFT LCD with anti-reflection coating and 5-level brightness adjustment, Vari-angle TFT LCD
Frame coverage (shooting mode)	Approx. 100% horizontal and 100% vertical (compared to actual picture)
Frame coverage (playback mode)	Approx. 100% horizontal and 100% vertical (compared to actual picture)
Storage	
Media	Internal memory (approx. 86 MB) SD/SDHC/SDXC memory card
File system	DCF, Exif 2.3, DPOF, and MPF compliant
File formats	Still pictures: JPEG, NRW (RAW) (Nikon's own format) 3D images: MPO Sound files (voice memo): WAV Movies: MOV (Video: H.264/MPEG-4 AVC, Audio: AAC stereo)

Image size (pixels)	• 12 M 4000×3000 • 4 M 2272×1704 • VGA 640×480 • 16:9 9M 3968×2232 • 8 M 3264×2448 • 2 M 1600×1200 • 3:2 3984×2656 • 1:1 3000×3000
ISO sensitivity (Standard output sensitivity)	• ISO 80 - 1600 • ISO 3200, Hi 1 (equivalent to 6400) (available when using P, S, A or M mode)
Exposure	
Metering mode	Matrix (224-segment matrix), center-weighted, or spot. Also when AF area mode is set to Manual , the AF area can be coupled to the metering range using Focus-coupled metering .
Exposure control	Programmed auto exposure with flexible program, shutter priority auto, aperture-priority auto, manual, exposure bracketing (Tv, Av, Sv) enabled, exposure compensation (in steps of 1/3 EV in the range of +/-3.0 EV for still pictures and +/-2.0 EV for movies) enabled
Shutter	Mechanical and CMOS electronic shutter
Speed	• 1/4000 * - 1 s • 1/4000 * - 60 s (when ISO sensitivity is set to 80 - 400 in M mode) * When the aperture value is set to f/4.5 - f/8 (wide-angle position) or the value is set to f/7.1 - f/8 (telephoto zoom position)
Aperture	Electronically-controlled 7-blade iris diaphragm
Range	13 steps of 1/3 EV (W) (A , M mode)
Self-timer	Durations of 1, 2 or 10 seconds can be selected
Built-in flash	
Range (approx.) (ISO sensitivity: Auto)	[W]: 0.5 - 10 m (1 ft 8 in. - 32 ft) [T]: 0.5 - 5.5 m (1 ft 8 in. - 18 ft)
Flash control	TTL auto flash with monitor pre-flashes and manual flash enabled
Flash exposure compensation	In steps of 1/3 EV in the range between -2 and +2 EV
Accessory shoe	ISO 518 hot-shoe with sync and data contacts and safety lock
Nikon Creative Lighting System	• i-TTL flash control support in combination with Nikon Creative Lighting System-compatible Speedlights (only Standard i-TTL flash control is supported during spot metering mode). • Flash Color Information Communication is supported. • Advanced Wireless Lighting is supported by setting SB-910, SB-900, SB-800 or SB-700 to master flash or by setting SU-800 to the Commander mode (the remote flash setting is only applicable to Group A). • Advanced Wireless Lighting is supported by setting the built-in flash to the Commander mode (only applicable to Group A and fixed at 3 CH).

Specifications

Interface	Hi-Speed USB
Data transfer protocol	MTP, PTP
Video output	Can be selected from NTSC and PAL
HDMI output	Can be selected from Auto, 480p, 720p, and 1080i
I/O terminal	• Audio/video output; digital I/O (USB) • HDMI Mini Connector (Type C) (HDMI output) • External microphone connector (stereo mini-pin jack (3.5 mm diameter), plug-in power type) • Accessory terminal
Supported languages	Arabic, Bengali, Chinese (Simplified and Traditional), Czech, Danish, Dutch, English, Finnish, French, German, Greek, Hindi, Hungarian, Indonesian, Italian, Japanese, Korean, Norwegian, Polish, Portuguese (European and Brazilian), Romanian, Russian, Spanish, Swedish, Tamil, Thai, Turkish, Ukrainian, Vietnamese
Power sources	• One Rechargeable Li-ion Battery EN-EL14 (included) • AC Adapter EH-5b (used in combination with the Power Connector EP-5A) (available separately)
Battery life ¹	
Still pictures	Approx. 330 shots when using EN-EL14
Movie recording (actual battery life for recording) ²	Approx. 1 h 10 min when using EN-EL14
Tripod socket	1/4 (ISO 1222)
Dimensions (W × H × D)	Approx. 118.5 × 72.5 × 50.4 mm (4.7 × 2.9 × 2.0 in.) (excluding projections)
Weight	Approx. 392 g (13.9 oz) (including battery and SD memory card)
Operating environment	
Temperature	0°C - 40°C (32°F - 104°F)
Humidity	85% or less (no condensation)

- Unless otherwise stated, all figures assume a fully-charged battery and an ambient temperature of 23 ±3 °C (73.4 ±5.4 °F) as specified by the Camera and Imaging Products Association (CIPA).

¹ Figures based on the Camera and Imaging Products Association (CIPA) standards for measuring the endurance of camera batteries. Performance for still pictures measured under the following test conditions: **Normal** selected for Image quality,  **4000×3000** selected for Image size, zoom adjusted with each shot, and flash fired with every other shot. Movie recording time assumes that  **HD 1080p★ (1920×1080)** is selected for Movie options. The values may vary depending on operating conditions such as the interval between shots and the length of time menus and images are displayed.

² Individual movie files cannot exceed 4 GB in size or 29 minutes in length. Recording may end before this limit is reached if camera temperature becomes elevated.

Rechargeable Li-ion Battery EN-EL14

Type	Rechargeable lithium-ion battery
Rated capacity	DC 7.4 V, 1030 mAh
Operating temperature	0°C - 40°C (32°F - 104°F)
Dimensions (W × H × D)	Approx. 38 × 53 × 14 mm (1.5 × 2.1 × 0.6 in.) (excluding projections)
Weight	Approx. 48 g (1.7 oz) (excluding terminal cover)

Battery Charger MH-24

Rated input	AC 100 - 240 V, 50/60 Hz, 0.2 A max.
Rated output	DC 8.4 V, 0.9 A
Supported rechargeable battery	Rechargeable Li-ion Battery EN-EL14
Charging time	Approx. 1 hour and 30 minutes when no charge remains
Operating temperature	0°C - 40°C (32°F - 104°F)
Dimensions (W × H × D)	Approx. 70 × 26 × 97 mm (2.8 × 1.0 × 3.8 in.) (excluding plug adapter) For Argentina: Approx. 70 × 68 × 104 mm (2.8 × 2.7 × 4.1 in.) For Korea: Approx. 70 × 76.5 × 104 mm (2.8 × 3.0 × 1.1 in.)
Weight	Approx. 89 g (3.1 oz) (excluding plug adapter) For Argentina: Approx. 125 g (4.5 oz) For Korea: Approx. 120 g (4.2 oz)

✓ Specifications

- Nikon will not be held liable for any errors this manual may contain.
- The appearance of this product and its specifications are subject to change without notice.

Supported Standards

- **DCF:** Design Rule for Camera File System is a standard widely used in the digital camera industry to ensure compatibility among different makes of camera.
- **DPOF:** Digital Print Order Format is an industry-wide standard that allows pictures to be printed at a digital photo lab or with a household printer from print orders stored on the memory card.
- **Exif version 2.3:** This camera supports Exif (Exchangeable Image File Format for Digital Still Cameras) version 2.3, a standard that allows information stored with photographs to be used for optimal color reproduction when images are output from Exif-compliant printers.
See the instruction manual of the printer for further details.
- **PictBridge:** A standard developed cooperatively by the digital camera and printer industries, allowing photographs to be output directly to a printer without connecting the camera to a computer.

AVC Patent Portfolio License

This product is licensed under the AVC Patent Portfolio License for the personal and non-commercial use of a consumer to (i) encode video in compliance with the AVC standard ("AVC video") and/or (ii) decode AVC video that was encoded by a consumer engaged in a personal and non-commercial activity and/or was obtained from a video provider licensed to provide AVC video. No license is granted or shall be implied for any other use. Additional information may be obtained from MPEG LA, L.L.C.

See <http://www.mpegla.com>.

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Index

Symbols

AE/AF-L 43, 
AE-L/AF-L button 4
AF AF area mode 55, 71, 
A Aperture-priority auto mode 48, 50
OK Apply selection button 6
BKT Auto bracketing 67, 68, 
 Auto mode 26, 34
 Delete button 33, , 
DISP Display button 9
 Flash mode 55, 56
 Flash pop-up control 56
 Focus mode 55, 62
Fn1 Function 1 button 4, ,
, , 
Fn2 Function 2 button 4, 
QUAL Image quality/Image size/Movie
 options 67, 68, 75, 105, 
ISO ISO sensitivity 67, 68, 105, 106,

M Manual mode 48, 50
MENU Menu button 10, 70, 93, 107,
 110
 CSM Movie custom setting mode 101
 Movie mode 101
 My Menu 67, 68, 
 Picture Control 67, 68, 105, 106,

 Playback button 5, 32
 Playback zoom 91
P Programmed auto mode 48, 50
SCENE Scene mode 35
 Self-timer/Smile timer/Remote control
 55, 59, 60, 
S Shutter-priority auto mode 48, 50
EFFECTS Special effects mode 45
T Tele 29
 Thumbnail display 92
U1, U2 or U3 User settings mode 52
WB White balance 67, 68, 105, 106,


W Wide 29

JPG 
.MOV 
.MPO 
.NRW 
.WAV 

Numerics

3D photography  43

A

AC adapter 17, , 
 Accessory shoe 1, 87
 Accessory Shoe Cover 1, 87
 Accessory terminal 2, 
 Active D-Lighting 72, 
 AE/AF lock button 113, 
 AF area mode 55, 71, 
 AF assist 111, 
 AF mode 71, 108, , 
 AF/access lamp 30
 Aperture value 48
 Aperture-priority auto mode 48, 50
 Audio/video cable 96, 
 Audio/video-in jack 96, 99, 
 Auto 57
 Auto bracketing 67, 68, , 
 Auto off 23, 111, 
 Auto with red-eye reduction 57, 58
 Autofocus mode 63, 71, 108, ,

 AV cable 96, 

B

Backlighting  40
 Battery 16, 18
 Battery charger 16
 Battery level indicator 22
 Battery-chamber/memory card slot cover
 18, 20
 Beach  37
 Best shot selector 39, 71, 
 Black and white copy  39

Black border 94, 15
 BSS 71, 44
 Built-in ND filter 72, 108, 52
 Button sound 111, 77

C

Calendar display 92
 Charger 16
 Choose key picture 94, 67
 Close range only 63
 Close-up 38
 CLS 87
 Color temperature 34
 Command dial 3, 5, 48
 Command dial rotation 112, 81
 Commander mode 57, 72, 56
 Computer 96, 99
 Continuous 71, 44
 Contrast 40
 COOLPIX Custom Picture Control 71, 107, 42
 COOLPIX Picture Control 67, 68, 105, 106, 38
 Crop 18
 Custom Picture Control 71, 107, 42
 Customize command dials 112, 81
 Customize My Menu 113, 86

D

Date and time 24, 69
 Daylight saving time 24, 70
 Delete 33, 109, 9, 63, 65
 Delete button options 112, 82
 Digital zoom 29, 111, 75
 Direct Print 96, 21
 Distortion control 72, 53
 D-Lighting 93, 12
 DPOF printing 24
 DSCN 100
 Dusk/dawn 38

E

Easy panorama 41, 3
 Editing movies 26
 Editing Pictures 10

Exposure compensation 66
 Exposure compensation dial 66
 Exposure mode 48
 Extension 100
 External flash unit 87, 56, 102
 External mic sensitivity 112, 80
 External microphone 104, 102
 Extracting still pictures 109, 27
 Eye-Fi upload 114, 89
 Eyelet for camera strap 7

F

Face detection 85
 Face priority 71, 47
 Fast motion movies 104, 30
 Features not available in combination 79
 File name 100
 Fill flash 57
 Filter effects 93, 14, 40
 Fireworks show 39
 Firmware version 114, 94
 Fixed aperture 111, 76
 Flash 55, 56
 Flash control 114, 90
 Flash exp. comp. 71, 51
 Flash mode 55, 56
 Fn1 + command dial 4, 113, 84
 Fn1 + selector dial 4, 113, 84
 Fn1 + shutter button 4, 113, 83
 Fn1 guide display 4, 113, 85
 Fn2 button 113, 85
 Focal length 72, 54, 14
 Focus 30, 47, 51, 59
 Focus area 31, 47
 Focus lock 86
 Focus mode 55, 62
 Focus-coupled metering 72, 55
 Folder name 100
 Food 39
 Format 20, 112, 79
 Format the internal memory 112, 79
 Format the memory card 20, 112, 79

Framing grid 12, 110, 
 FSCN 
 Full-frame playback 32
 Full-time AF 71, 108, , 

G

GPS options 114, 
 GPS Unit , 

H

HDMI 112, , 
 HDMI 3D output 
 HDMI device control 112, 
 HDMI mini connector 96, 
 HDR 40
 High-speed continuous 71, 
 Histogram 15, 110, 
 HS movie 104, , 

I

Identifier 
 Image copy 94, 
 Image quality 75
 Image sharpening 
 Image size 75, 77
 Infinity 63
 Internal memory indicator 22
 Interval Timer Shooting 71, , 

 ISO sensitivity 67, 68, 105, 106, 
 ISO sensitivity step value 111, 

L

Landscape  37
 Language 112, 
 Lens , 
 Lens cap 7
 Lens hood 
 Lens ring 1, 
 Li-ion rechargeable battery 16

M

M exposure preview 72, 
 Macro close-up 63
 Main command dial 3, 5, 48
 Manual 57

Manual focus 63, 
 Manual mode 48, 50
 Memory capacity 22
 Memory card 20, 21
 Memory card slot 20
 Metering 71, 
 MF distance indicator units 114, 
 Microphone 101, 
 Minimum shutter speed 68, 106, 
 Mode dial 26
 Monitor 8, 9, 12, 
 Monitor brightness 110, 
 Monitor settings 110, 
 Movie custom setting mode 101
 Movie length 101, 
 Movie menu 107
 Movie mode 101
 Movie options 106, 
 Movie playback 109
 Movie recording 101
 Multi selector 3, 5, 55
 Multi selector right press 112, 
 Multi-shot 16 71, 
 Museum  39
 My Menu 68, 113, 

N

Night landscape  38
 Night portrait  37
 Nikon Creative Lighting System 87,
 15
 Noise reduction filter 71, 
 NRW (RAW) Images 76, 
 NRW (RAW) processing 94, 
 Number of exposures remaining 22, 78

O

Off 57
 Optical zoom 29
 Optional accessories 

P

Panorama assist 41, 
 Panorama  41
 Paper size 

Party/indoor  37
 Pet portrait  42
 Photo info 110,  71
 PictBridge 96,  21,  17
 Picture Control 67, 68, 105, 106,  38
 Playback 32, 109,  65
 Playback menu 93
 Playback mode 32
 Playback zoom 91
 Portrait  36
 Power 22, 23, 24
 Power connector 17,  102,  103
 Power switch/power-on lamp 2, 23
 Preset manual  35
 Pressing halfway 4, 30
 Print  21,  22,  23
 Print date 110,  72
 Print order 93,  60
 Print order date option  61
 Printer 96,  21
 Programmed auto mode 48, 50
 Protect 93,  64

Q

Quick adjust  40
 Quick menu 67, 105
 Quick menu dial 67, 105
 Quick retouch 93,  12

R

Rear-curtain sync 57
 Rechargeable battery 16
 Record orientation 111,  77
 Recording slow motion movies 104,  30
 Remote control 55,  104,  105
 Remote cord  102
 Reset all 114,  91
 Reset file numbering 113,  87
 Reset user settings 54
 Reverse indicators 114,  90
 Rotary multi selector 3, 5, 55
 Rotate image 93,  64

Rotate tall 111,  78
 RSCN  100

S

Saturation  40
 Save user setting 52
 Scene auto selector  36
 Scene mode 35
 Selecting pictures 95
 Self-timer 55, 59
 Self-timer lamp 59
 Self-timer: after release 110,  73
 Sequence 32,  8
 Sequence display options 94,  67
 Setup menu 110
 Shooting 26
 Shooting date information 9, 12
 Shooting menu 70
 Shooting mode 27, 108,  58
 Shutter sound 111,  77
 Shutter speed 48, 82
 Shutter-priority auto mode 48, 50
 Shutter-release button 4, 6, 30
 Single 71,  44
 Single AF 71, 108,  51,  59
 Skin softening 44, 93,  13
 Slide show 93,  62
 Slow sync 57
 Small picture 93,  15
 Smile timer 55, 60
 Snow  37
 Sound settings 111,  77
 Special effects mode 45
 Speedlight 87,  102
 Sports  37
 SSCN  100
 Startup zoom position 72,  54
 Straighten 94,  16
 Sub-command dial 3, 5, 48
 Subject tracking 71,  48,  49
 Sunset  37
 Switching between tabs 11

I

- Target finding AF 71, 84, 49
- Tele 29
- Thumbnail playback 92
- Time difference 70
- Time zone 24, 70
- Time zone and date 24, 110, 69
- Tone level 15
- Tone level information 9, 14, 71
- Toning 41
- TV settings 112, 80

U

- USB cable 96, 99, 21
- USB/Audio/video output connector 96, 99, 19, 21
- User setting modes 52

V

- Vibration reduction 111, 73
- Video mode 112, 80
- View grid 39
- ViewNX 2 97
- Virtual horizon 12, 110, 71
- Virtual horizon display 110, 71
- Voice memo 94, 65
- Volume 109

W

- Welcome screen 110, 68
- White balance 67, 68, 105, 106, 33
- Wide 29
- Wind noise reduction 108, 59

Z

- Zoom 29
- Zoom control 3, 5, 29
- Zoom memory 72, 54
- Zoom speed 111, 76

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